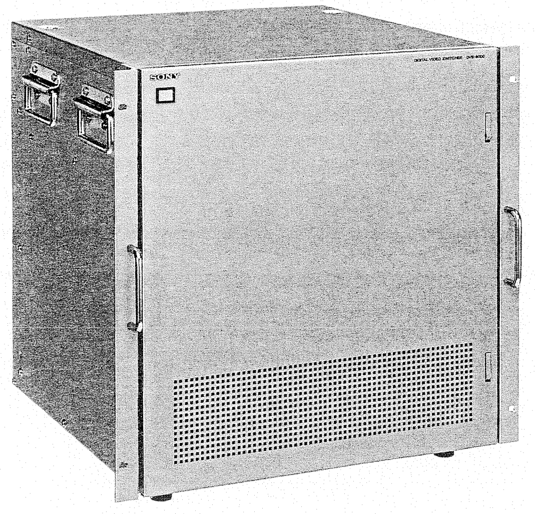
SONY®

DIGITAL VIDEO SWITCHER

DVS-8000



OPERATION AND MAINTENANCE MANUAL

1st Edition (Revised 1)

Serial No.10001 and Higher

For the customers in the USA

WARNING
This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a computing device pursuant to Subpart J of Part 15 of FCC Rules.

For the customers in the Canada
This apparatus complies with the Class A limits for radio noise emissions set out in radio interference regulations.

Pour les utilisateurs au Canada
Cet appareil est conforme aux normes Classe A, pour bruits radioélectriques. Tel que spécifiér dans le reglement sur le brouillage radioélectrique.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

Check the metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 3.5mA. Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 5.25V so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 20V AC range are suitable. (See Fig. A)

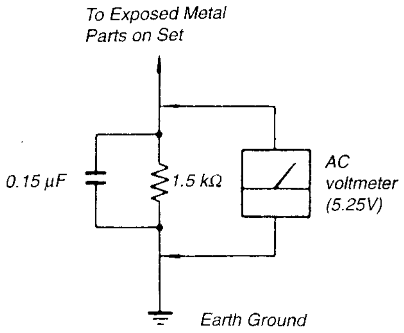


Fig. A. Using an AC voltmeter to check AC leakage.

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DVS-8000デジタルビデオスイッチャーシステムのマニュアルについて

DVS-8000スイッチャーシステムのプロセッサー部であるデジタルビデオスイッチャーDVS-8000と、これを制御するためのスイッチャーコントロールパネルBKDS-8010には、それぞれ下記のマニュアルが付属しています。

DVS-8000オペレーション アンド メンテナンスマニュアル

（このマニュアルです。スイッチャーに付属しています。）

第1章「取り扱い操作」では、DVS-8000システムの概要、スイッチャーの各部の働き、接続例などを記載しています。ビデオスイッチャーシステム全体を管理される方は、この章を最初にお読み下さい。

第2章以降では、システムの設置および保守点検に必要な情報を記載しています。

スイッチャーのメンテナンスが必要になったときや、何らかの異常が発生したときにお読みください。

DVS-8000/8000Cユーザーガイド

（コントロールパネルに付属しています。）

コントロールパネルの各部の働きと、スイッチャーの操作方法を記載しています。スイッチャーを操作するときに参照してください。

なお、このガイドブックでは、DVS-8000システムにデジタルマルチエフェクトDME-5000を接続した場合の操作方法についても説明しています。

BKDS-8010メンテナンスマニュアル

（コントロールパネルに付属しています。）

コントロールパネルのハードウェアに関する情報を記載しています。

コントロールパネルの設置時や、保守点検が必要になったときにお読みください。

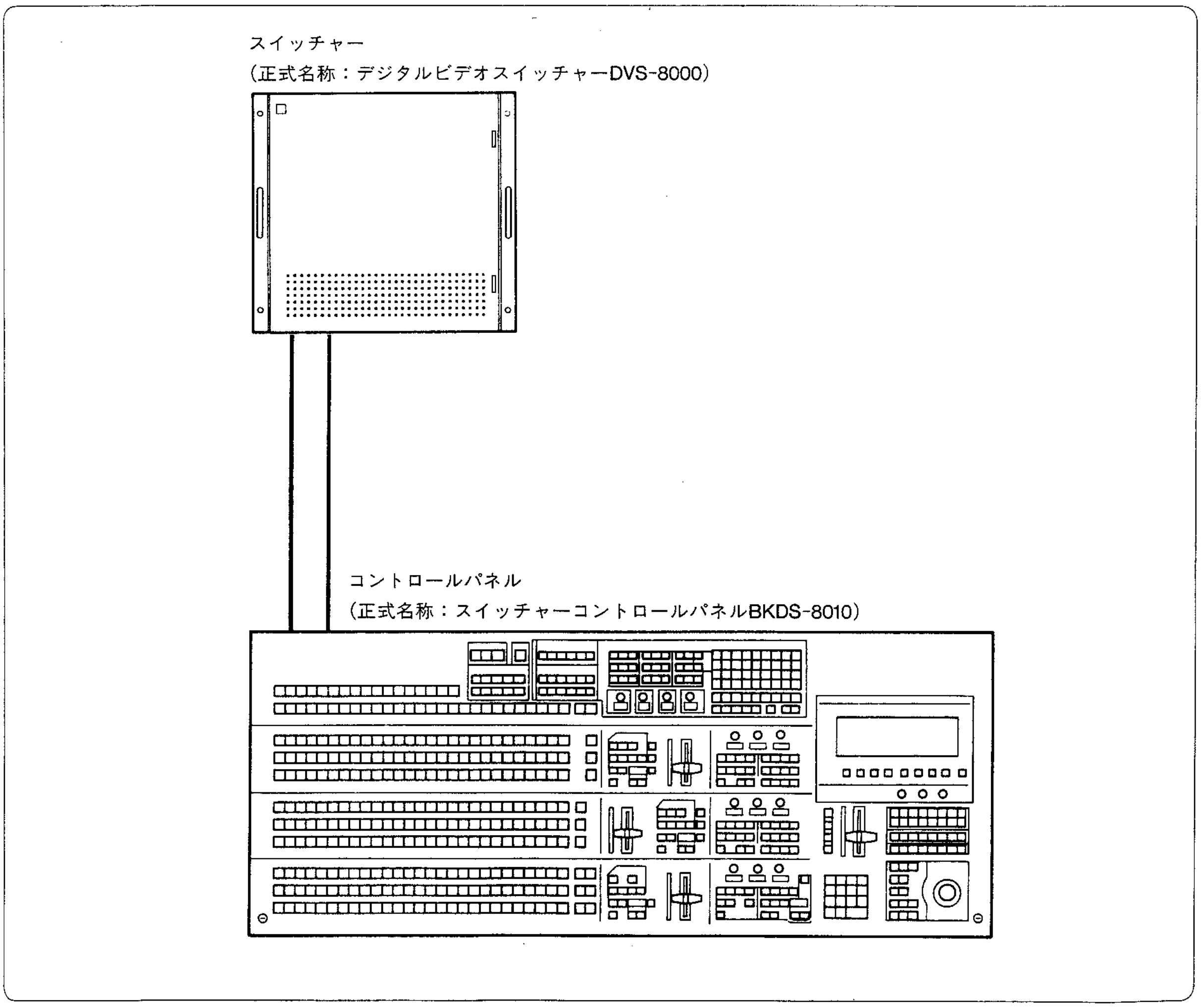
第1章　取り扱い操作

1-1.　概要

デジタルビデオスイッチャーDVS-8000は、放送局やポストプロダクションにおいてデジタルビデオシステムを構築するための、D2フォーマット用高性能スイッチャーです。スイッチャーの操作は、主として別売りのコントロールパネル（BKDS-8010）から行います。

なお、この第1章では各機器を次のように呼びます。

機器（正式名称）	本マニュアルでの呼びかた
デジタルビデオスイッチャーDVS-8000	スイッチャー
スイッチャーコントロールパネルBKDS-8010	コントロールパネル


スイッチャー
（正式名称：デジタルビデオスイッチャーDVS-8000）
コントロールパネル
（正式名称：スイッチャーコントロールパネルBKDS-8010）

1-1-1.　主な特長

完全デジタル処理により、高画質、高安定性を維持

D2フォーマットのビデオテープレコーダーなどからシリアル方式で入力されたデジタル信号は、すべてデジタル回路によって内部処理され、シリアルデジタル信号のまま出力されます。スイッチャーの入出力は10ビット、内部処理は最大14ビットにまで語長を拡張しているため特性劣化が少なく、高画質であるというデジタルの利点を損なわず、高度の映像効果を生み出すことができます。
また、入力部にバッファーメモリーを備えているため、リファレンス信号に対して約±0.5Hの範囲内で自動的に位相調整できるだけでなく、入力信号にある程度のジッターがあっても安定した動作が可能です。

入出力にシリアルデジタルフォーマットを採用

デジタル信号の入出力はすべてシリアルで行っており、BNCケーブル1本でデジタルビデオ信号の伝送ができます。このため、従来のパラレル伝送に比べて接続が容易になり、システム全体が大幅に簡略化されるとともに、長距離伝送が可能になっています。

プライマリー入力部はデジタル／アナログ対応

標準で8チャンネルを装備しているデジタルプライマリー入力は、別売りの基板BKDS-8020を組み込むことにより、最大32チャンネルまで増設できます。また、従来のアナログシステムとのインターフェースのために、アナログコンポジット信号入力用の別売り基板BKDS-8021も用意されています。
入力された信号はすべてバックグラウンド、キーフィル、キーソースとして任意に使用できます。

DME-5000とのリンクオペレーションが可能

デジタルマルチエフェクトDME-5000を接続することにより、コントロールパネルからDME-5000とスイッチャーの両方をコントロールできます。このオペレーションはDME LINK® と呼ばれ、スイッチャーのワイプとDME-5000のエフェクトを組み合わせたDMEワイプなど、高度なオペレーションが可能です。また、コントロールパネル上のメニュー操作部から、さまざまな項目についてDME-5000とスイッチャーの設定を行うことができます。

豊富なオプション群

プライマリー入力の増設、アナログコンポジット信号入力、クロマキーヤー、フレームメモリーなど、用途に応じたオプション機能が用意されています。これらのオプション機能は、それぞれに別売りの基板を組み込むだけで使用することができます。

外部機器とのインターフェース

高度編集システムであるエディティングコントロールシステムBVE-9000用のインターフェースを標準装備しています。BVE-9000と接続することにより、コントロールパネルで作成したデータの保存や、キーフレームの動作シュミレーションなどが可能になります。また、デジタルビデオインターフェースユニットPFV-D100やマトリックススイッチャー、コントロールターミナル、タリー装置などの外部機器を必要に応じて接続することができます。

大規模なIC化による省電力、省スペース設計

スイッチャーとしての機能が十分に搭載されている一方、大幅なIC化による小型化、低消費電力構造が実現されています。

容易なメンテナンス

万一の故障などによるダウンタイムを短縮するため、電源、回路基板、ファンモーターなど主要部分に対しては、キャビネット前面から保守作業を行えるように配慮しています。また、回路調整機能や設定機能の多くをソフトウェアでサポートすることにより、調整ボリュームやスイッチ類の個数を最小限に抑えています。さらに、スペアパワーサプライユニットBKDS-8090を用意することにより、電源部故障時のダウンタイムを短縮することができます。

充実したスイッチャー機能

コントロールパネルには2つのM/E列と1つのPGM/PST列があり、M/E列はそれぞれ独立した2系統のキーヤーを備えています（PGM/PST列用のキーヤーは1系統のみ）。これらのキーヤーには、強力なモディファイヤーが用意されており、段階的に複雑な映像効果を作成することができます。作成データはコントロールパネルに付属している3.5インチフロッピーディスクドライブによって保存できるため、同一の効果を繰り返し効率的に使うことが可能です。詳しくは、コントロールパネルに付属の「ユーザーガイド」をご覧ください。

1-1-2.　使用上のご注意

プリント基板の抜き差しについて

通常はプリント基板を抜き差しすることは避けてください。

保守点検や別売り基板の取り付けなどのため、やむを得ず抜き差しするときは、以下のことを必ず守ってください。

- 基板を抜き差しする前に、必ずスイッチャーのPOWERスイッチをOFFにしてください。POWERスイッチの位置については、1-6（J）ページをご覧ください。
- 基板を差し込んだ後、電源を入れるときは、スイッチャー内部に表示されているスロット番号と基板に表示されているスロット番号が一致していることを確認してから、POWERスイッチをONにしてください。詳しくは“2-5-2 カード基板の設置方法„をご覧ください。

これらの注意が守られなかった場合は、回路が故障することがあります。

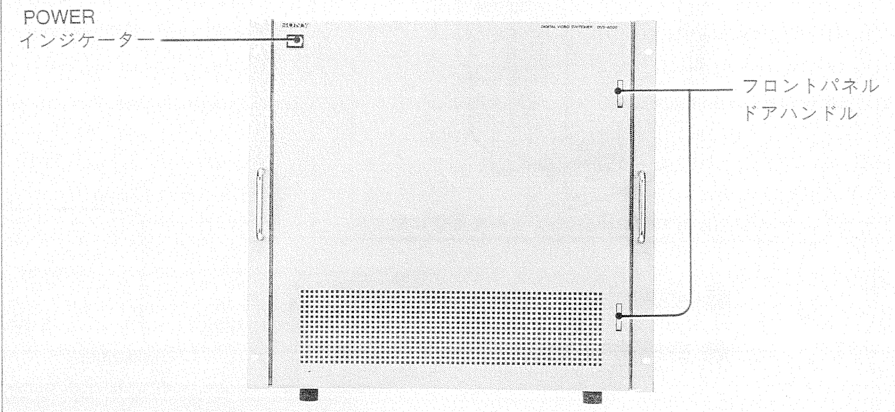
サーキットブレーカーについて

スイッチャー内部に過大な電流が流れると、サーキットブレーカーが作動して電源が自動的に切れます。POWERスイッチをONにしても通電しないときは、前面パネルを開けて、白色のBREAKERボタンを押し込んでください。BREAKERボタンの位置については、1-6（J）ページをご覧ください。

1-2.　各部の名称と働き

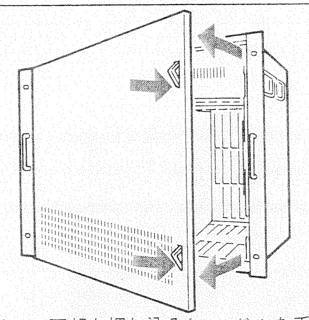
1-2-1.　前面パネルと内部

前面パネル

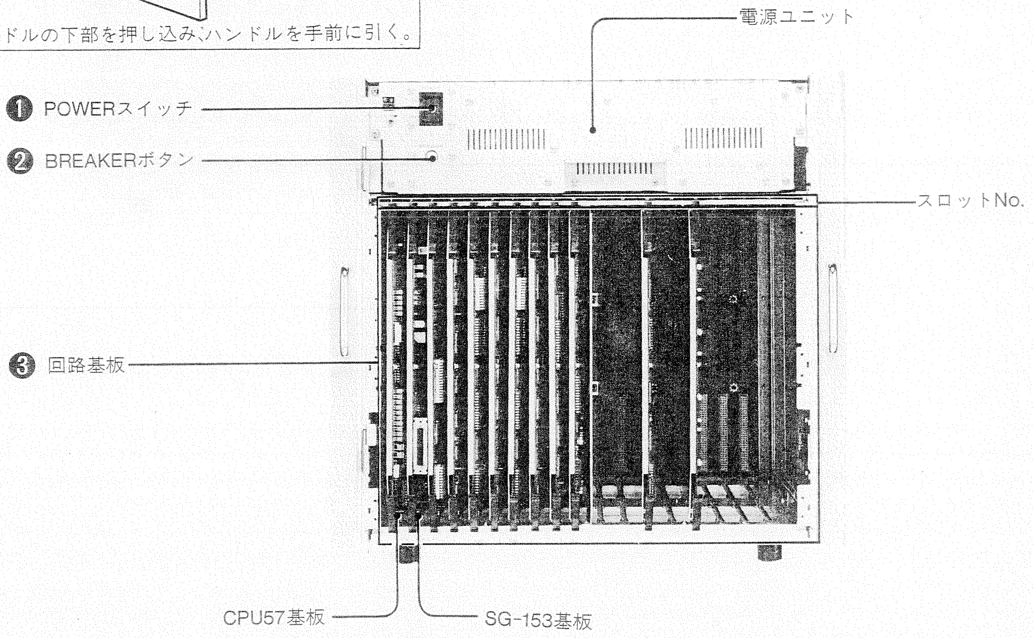

POWER
インジケーター
フロントパネル
ドアハンドル

内部

前面パネルドアの開け方



ドアハンドルの下部を押し込み、ハンドルを手前に引く。


電源ユニット
❶ POWERスイッチ
❷ BREAKERボタン
スロットNo.
❸ 回路基板
CPU57基板
SG-153基板

❶ POWER（電源）スイッチ

スイッチャーの電源をON/OFFします。

❷ BREAKER（ブレーカー）ボタン

スイッチャー内部に過大な電流が流れると、このボタンが自動的に突出し、電源が切れます。

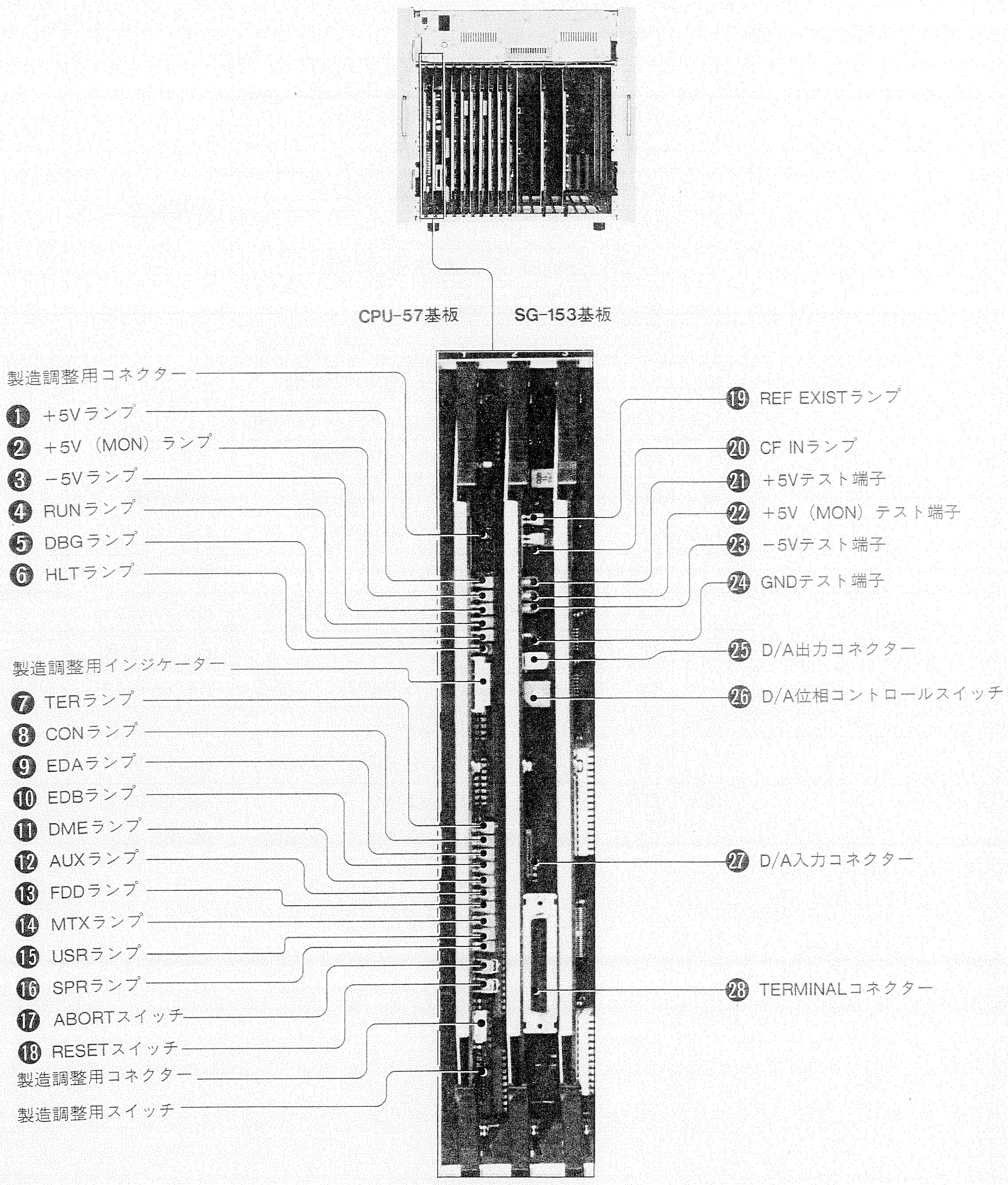
❸ 回路基板

スイッチャーが動作するために必要な回路基板です。

スロットと基板の対応は次の通りです。＊印のスロットには表中に示すようなオプション基板を組み込むことができます。

スロット No.	基板名称	機種名	備考
1	CPU-57 CPU BOARD	標準装備	
2	SG-153 SYNC GENERATOR BOARD		
3	WKG-5 ENHANCED WIPE BOARD		
4	WKG-4 BASIC WIPE BOARD		
5	KPC-1 KEY PROCESSOR BOARD		
6	MIX-4 MIXER BOARD		
7	KPC-1 KEY PROCESSOR BOARD		
8	MIX-4 MIXER BOARD		
9	MIX-6 DSK (DOWNSTREAM KEYER) BOARD		
10	OUT-1 OUTPUT PROCESSOR BOARD		
11＊	CRK-5 CHROMA KEY PROCESSOR BOARD	BKDS-8030	
12＊	ADC-5 CHROMA KEY INPUT BOARD		
13	MAT-1 MATTE GENERATOR BOARD	標準装備	
14＊	MY-50 FRAME MEMORY BOARD	BKDS-8040	
15＊	XPT-1 DIGITAL INPUT BOARD	標準装備	1～8ch用
	(または) ADC-9 ANALOG INPUT BOARD	BKDS-8021	
16＊	XPT-1 DIGITAL INPUT BOARD	BKDS-8020	9～16ch用
	(または) ADC-9 ANALOG INPUT BOARD	BKDS-8021	
17＊	XPT-1 DIGITAL INPUT BOARD	BKDS-8020	17～24ch用
	(または) ADC-9 ANALOG INPUT BOARD	BKDS-8021	
18＊	XPT-1 DIGITAL INPUT BOARD	BKDS-8020	25～32ch用
	(または) ADC-9 ANALOG INPUT BOARD	BKDS-8021	

CPU-57基板とSG-153基板には、スイッチャーの動作状況を示すランプ類をはじめ、調整やテストのための部品がキャビネット前面側に搭載されています。以下にこれらの部品について簡単に説明します。


CPU-57基板
SG-153基板
製造調整用コネクター
❶ +5Vランプ
❷ +5V（MON）ランプ
❸ −5Vランプ
❹ RUNランプ
❺ DBGランプ
❻ HLTランプ
製造調整用インジケーター
❼ TERランプ
❽ CONランプ
❾ EDAランプ
❿ EDBランプ
⓫ DMEランプ
⓬ AUXランプ
⓭ FDDランプ
⓮ MTXランプ
⓯ USRランプ
⓰ SPRランプ
⓱ ABORTスイッチ
⓲ RESETスイッチ
製造調整用コネクター
製造調整用スイッチ
⓳ REF EXISTランプ
⓴ CF INランプ
(21) +5Vテスト端子
(22) +5V（MON）テスト端子
(23) −5Vテスト端子
(24) GNDテスト端子
(25) D/A出力コネクター
(26) D/A位相コントロールスイッチ
(27) D/A入力コネクター
(28) TERMINALコネクター

❶ ＋5Vランプ（緑）

基板スロット1～9の＋5V電源の状態を表示します。電源が正常に供給されているときは点灯しています。CPU-57基板のF1ヒューズが切れているとき、または＋5V電源が供給されていないときは消えています。

❷ ＋5V（MON）ランプ（緑）

スロット10～18の＋5V電源の状態を表示します。電源が正常に供給されているときは点灯し、供給されていないときは消えています。

❸ －5Vランプ（緑）

システム全体の－5V電源の状態を表示します。電源が正常に供給されているときは点灯し、CPU-57基板のF2ヒューズが切れているとき、または＋5V電源が供給されていないときは消えています。

❹ RUN（CPU動作）ランプ（緑）

CPUの動作状態を表示します。CPUが正常に動作しているときは点灯し、停止しているときは消えています。

❺ DBG（デバッグ用）ランプ（緑）

製造時の調整用に使用します。

❻ HLT（CPUホルト）ランプ（赤）

CPUが停止したとき点灯します。

❼～⓰ 通信状態表示ランプ（緑）

後面パネルのコネクターに接続された機器との通信状態を表示します。それぞれのラインからデータやコマンドが入力されるたびに、点灯と消灯を交互に繰り返します。各ランプに対応するコネクター名は以下の通りです。

No.	ランプ名称	対応コネクター
7	TER	TERMINAL
8	CON	CONTROL PANEL（CONTROL）
9	EDA	EDITOR A
10	EDB	EDITOR B
11	DME	DME
12	AUX	AUX BUS
13	FDD	CONTROL PANEL（FDD）
14	MTX	MATRIX
15	USR	USER
16	SPR	SPARE

⓱ ABORT（システムアボート）スイッチ

製造時の調整用に使用します。

⓲ RESET（システムリセット）スイッチ

システムの初期化を行います。

⓳ REF EXIST（リファレンス入力）ランプ（緑）

後面パネルのREF INPUTコネクターからブラックバースト信号（またはそれに準ずる信号）が入力されているとき点灯します。

⓴ CF IN（カラーフレーム）ランプ（緑）

入力されたリファレンス信号のSC-H位相が適正であることを表示します。SC-H位相が±20°以内であれば点灯し、スイッチャーが出力するビデオ信号の位相再現性が保証されます。

㉑ ＋5Vテスト端子（赤）

スロット1～9の＋5V電圧の測定端子です。スイッチャーの設置時やオプション基板を組み込んだときなど、電圧を再調整するために使用します。

㉒ ＋5V（MON）テスト端子（赤）

スロット10～18の＋5V電圧の測定端子です。スイッチャーの設置時やオプション基板を組み込んだときなど、電圧を再調整するために使用します。

㉓ －5Vテスト端子（青）

システム全体の－5V電圧の測定端子です。スイッチャーの設置時やオプション基板を組み込んだときなど、電圧を再調整するために使用します。

㉔ GND（アース）テスト端子（黒）

㉑～㉓のテスト端子に対して基準となるGNDテスト端子です。

㉕ D/A出力コネクター

D/A入力コネクター㉗に入力されたデジタル信号がD/A変換され、このコネクターからアナログ信号として出力されます。回路調整のために使用します。

㉖ D/A位相コントロールスイッチ

D/A入力コネクター㉗に入力されたデジタル信号をアナログに変換する際、クロックの位相を調整するために使用します。

㉗ D/A入力コネクター

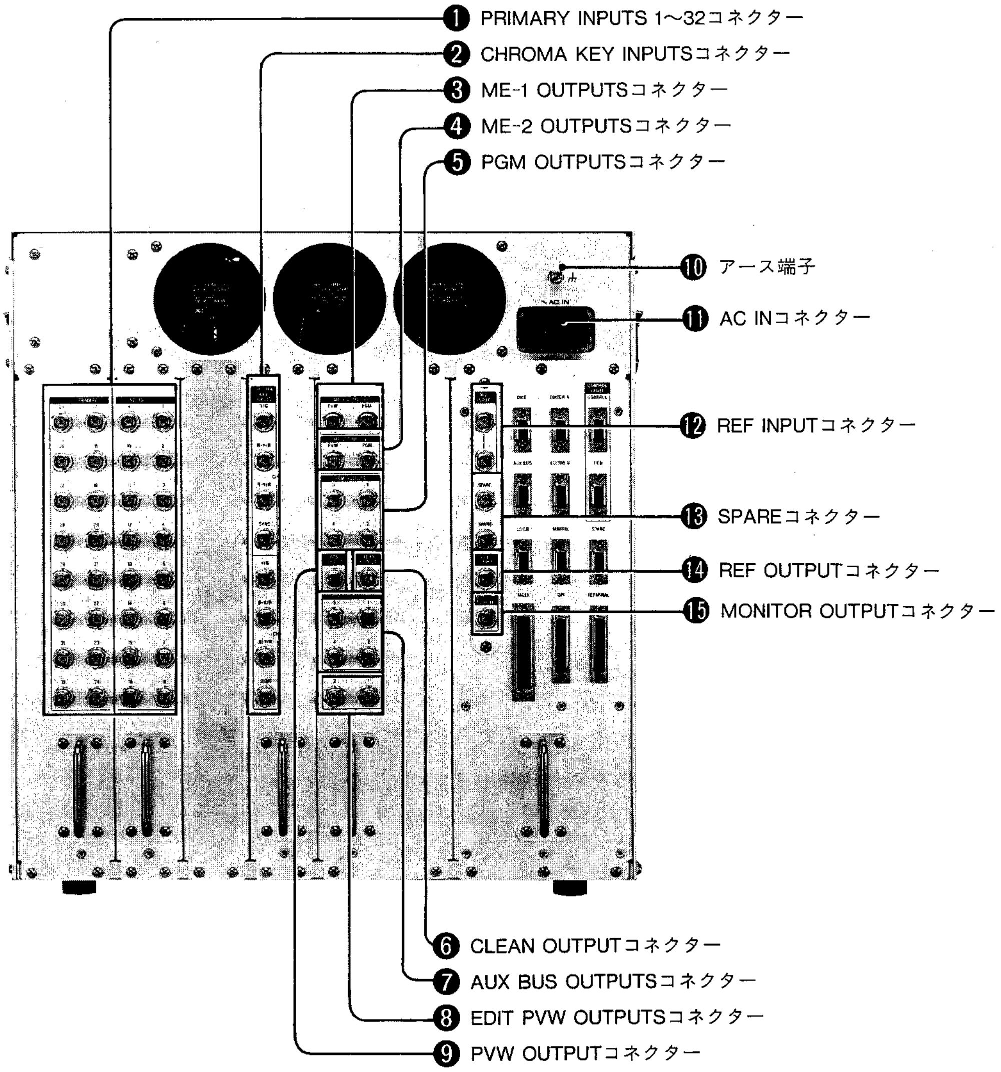
各基板上に設けられたデジタルTPコネクターにフレキシブルケーブルで接続し、デジタル信号を入力します。この信号は、アナログ信号に変換され、D/A出力コネクター㉕から出力されます。

㉘ TERMINALコネクター

コントロールターミナルに接続し、初期設定やメンテナンス時に使用します。RS-232C信号規格に準拠し、後面パネルのTERMINALコネクターと並列接続されています。

1-2-2.　後面パネル

入出力用コネクター


① PRIMARY INPUTS 1～32コネクター
② CHROMA KEY INPUTSコネクター
③ ME-1 OUTPUTSコネクター
④ ME-2 OUTPUTSコネクター
⑤ PGM OUTPUTSコネクター
⑩ アース端子
⑪ AC INコネクター
⑫ REF INPUTコネクター
⑬ SPAREコネクター
⑭ REF OUTPUTコネクター
⑮ MONITOR OUTPUTコネクター
⑥ CLEAN OUTPUTコネクター
⑦ AUX BUS OUTPUTSコネクター
⑧ EDIT PVW OUTPUTSコネクター
⑨ PVW OUTPUTコネクター

❶ PRIMARY INPUTS（プライマリー入力）1〜32コネクター（BNC型）

シリアルデジタルビデオ信号を入力します。チャンネル数は標準装備で8チャンネルですが、オプション基板BKDS-8020などを組み込むことにより、最大32チャンネルまでの入力が可能です。また、オプション基板BKDS-8021を組み込むことにより、アナログのビデオ信号を入力することもできます。

❷ CHROMA KEY INPUTS（クロマキー入力）コネクター（BNC型）

オプション基板BKDS-8030を組み込んだとき、外部からのクロマキーソース信号と同期信号をこのコネクターに入力できます。入力できる信号のフォーマットは、アナログのコンポーネント信号（Y/B－Y/R－YとSYNC、またはG/B/RとSYNC）です。2チャンネルの入力を、バックグラウンド、フォアグラウンドの両方に使用することができます（クリーンクロマキー機能）。

❸ ME-1 OUTPUTS（M/E-1出力）コネクター（BNC型）

コントロールパネル上のM/E-1ブロックで作成した映像を、シリアルデジタルビデオ信号として出力します。PGMコネクターはプログラムモニターに接続し、現在作成中の映像を見るために使用します。PVWはプレビューモニターに接続し、トランジション実行後にPGMコネクターから出力される画像をあらかじめ確認するために使用します。

❹ ME-2 OUTPUTS（M/E-2出力）コネクター（BNC型）

コントロールパネル上のM/E-2ブロックで作成した映像を、シリアルデジタルビデオ信号として出力します。PGMはプログラムモニターに、PVWはプレビューモニターに接続します。

❺ PGM OUTPUTS（プログラム出力）コネクター（BNC型）

コントロールパネル上のPGM/PSTブロックで作成した映像を、シリアルデジタルビデオ信号として出力します。4つのコネクターがあり、スイッチャーの最終出力としてそれぞれのプログラムモニター、ビデオテープレコーダーなどに接続します。

❻ CLEAN OUTPUT（クリーンフィード出力）コネクター（BNC型）

コントロールパネルのPGM/PSTブロックでダウンストリームキーヤーによって最終処理される前の映像を出力します。

❼ AUX BUS OUTPUTS（補助バス出力）1〜4コネクター（BNC型）

スイッチャーには、DMEなどの外部機器への出力用に4本の補助バス（AUX1〜4）があり、それぞれのバスごとに選択した信号がこのコネクターから出力されます。各バスに割り当てる信号は、コントロールパネル上で選択します。

❽ EDIT PVW OUTPUTS（エディットプレビュー出力）1、2コネクター（BNC型）

コントロールパネル上でプレビューバス（PVW）出力として選択された信号を出力します。編集機などからスイッチャーをコントロールする場合のモニター出力などに使用します。2つのコネクターから同じ信号が出力されます。

また、この出力信号と同じ内容のアナログ信号が、MONITOR OUTPUTコネクター⓯から出力されます。

❾ PVW OUTPUT（プレビュー出力）コネクター（BNC型）

コントロールパネル上のPGM/PSTブロックにおけるエフェクトトランジション実行後にPGM OUTPUTSコネクター❺から出力される映像を出力します。プレビューモニターに接続し、最終出力画像を前もって確認するために使用します。

❿ アース端子

システムの接地線に接続します。

⓫ AC IN（AC電源入力）コネクター

付属の電源コードで90〜132VのAC電源に接続します。

⓬ REF INPUT（リファレンスビデオ入力）コネクター（BNC型）

スイッチャーを外部同期信号に同期させて使用するとき、アナログのリファレンスビデオ信号（ブラックバースト信号）をこのコネクターに入力します。2つのコネクターはループスルーになっており、どちらか一方に入力した信号をそのまま他方から出力することができます。ループスルー出力を使用しない場合は、付属の75Ω終端器で必ず終端してください。

⑬ SPARE（スペア）コネクター（BNC型）

現在は使用されていません。

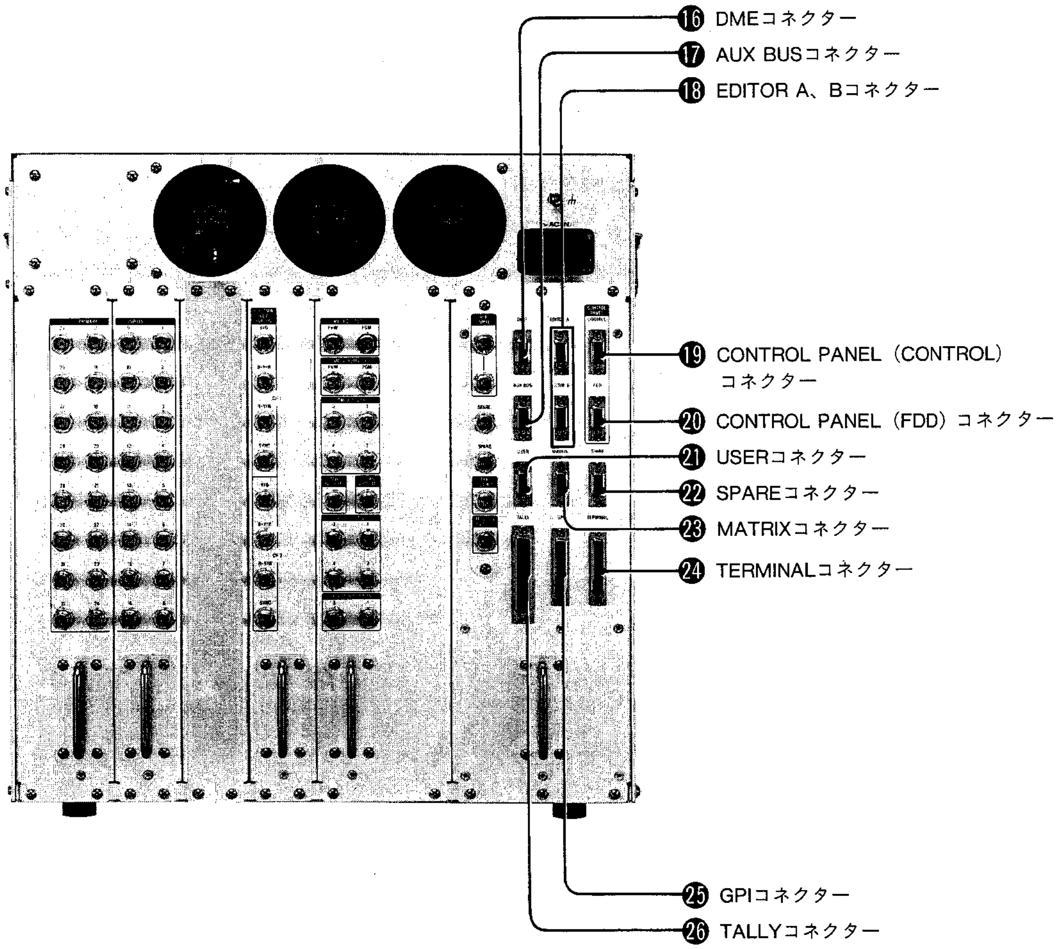
⑭ REF OUTPUT（リファレンス信号出力）コネクター（BNC型）

アナログのリファレンスビデオ信号(ブラックバースト信号)を出力します。REF INPUTコネクター⑫に入力されている基準信号に対するこの信号の位相は、コントロールパネルから±1Hの範囲で調整することができます。

⑮ MONITOR OUTPUT（モニター出力）コネクター（BNC型）

プレビューバス（PVW）のアナログ出力用コネクターです。EDIT PVW OUTPUTSコネクター❽から出力される信号と同じ内容のアナログ信号を出力します。

インターフェース用コネクター


⑯ DMEコネクター
⑰ AUX BUSコネクター
⑱ EDITOR A、Bコネクター
⑲ CONTROL PANEL（CONTROL）コネクター
⑳ CONTROL PANEL（FDD）コネクター
㉑ USERコネクター
㉒ SPAREコネクター
㉓ MATRIXコネクター
㉔ TERMINALコネクター
㉕ GPIコネクター
㉖ TALLYコネクター

⑯ DME（デジタルマルチエフェクト）コネクター（D-SUB 9ピン）

デジタルマルチエフェクトDME-5000に接続します。RS-422A信号規格に準拠しています。

⑰ AUX BUS（補助バス）コネクター（D-SUB 9ピン）

スイッチャー内部の補助バス（AUX1～4）を制御するために使用します。RS-422A信号規格に準拠しています。

⑱ EDITOR（エディター）A、Bコネクター（D-SUB 9ピン）

エディティングコントロールシステムBVE-9000などの外部機器に接続すると、その外部機器からスイッチャーを制御できるようになります。通常はAコネクターを使用します（Bコネクターは機能拡張用です）。

⑲ CONTROL PANEL（CONTROL）（コントロール）コネクター（D-SUB 9ピン）

コントロールパネルBKDS-8010などに接続します。RS-422Aインターフェースを介して、コントロールパネルからスイッチャーを操作するために使用します。

⑳ CONTROL PANEL（FDD）（フロッピーディスクドライブ）コネクター（D-SUB 9ピン）

コントロールパネルBKDS-8010などに接続します。RS-422Aインターフェースを介して、コントロールパネルに接続されているフロッピーディスクドライブを制御するために使用します。

㉑ USER（ユーザー制御）コネクター（D-SUB 9ピン）

将来のシステム拡張用のコネクターです。RS-422A信号規格に準拠しています。

㉒ SPARE（制御用スペア）コネクター（D-SUB 9ピン）

スペアの制御用コネクターで、工場内でのみ使用します。RS-422A信号規格に準拠しています。

㉓ MATRIX（マトリックス）コネクター（D-SUB 9ピン）

外部のマトリックススイッチャーなどに接続します。RS-422A信号規格に準拠しています。

㉔ TERMINAL（ターミナル）コネクター（D-SUB 25ピン）

スイッチャーの初期設定や保守点検を行うとき、コントロールターミナルに接続します。RS-232C信号規格に準拠しており、スイッチャー内部のSG-153基板上のTERMINALコネクターと並列接続されています。

㉕ GPI（汎用入出力）コネクター（D-SUB 25ピン）

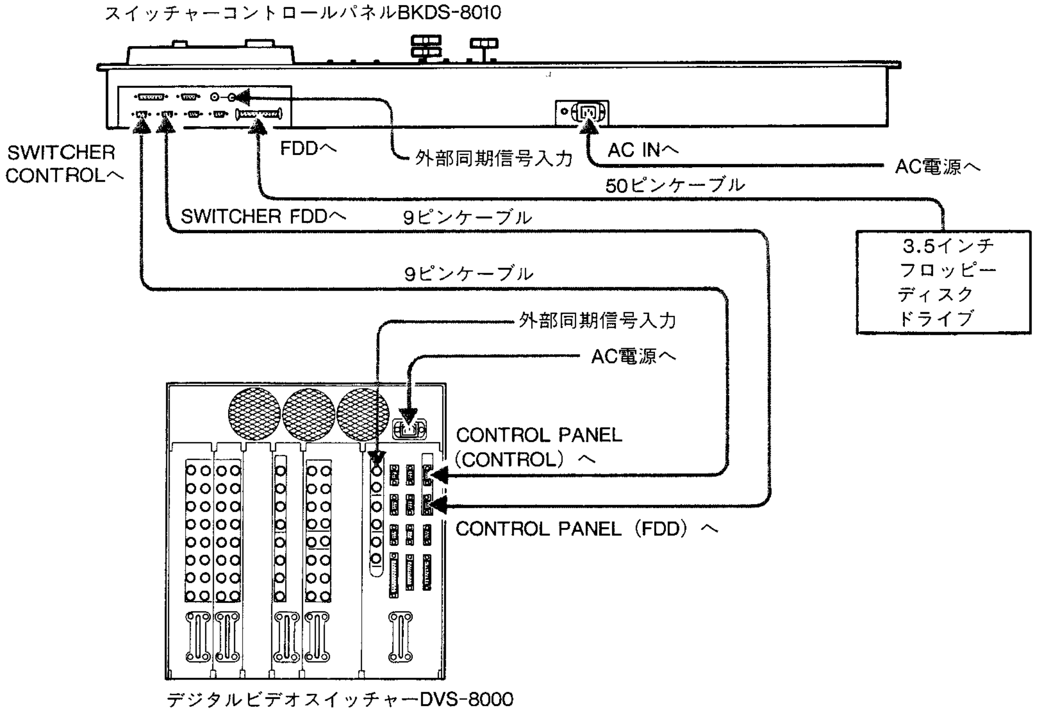
外部機器に接続し、トリガーの入出力を行うために使用します。入力8系統、出力7系統が用意されており、これらに対して入出力条件のプログラムが可能です。

㉖ TALLY（タリー出力）コネクター（D-SUB 50ピン）

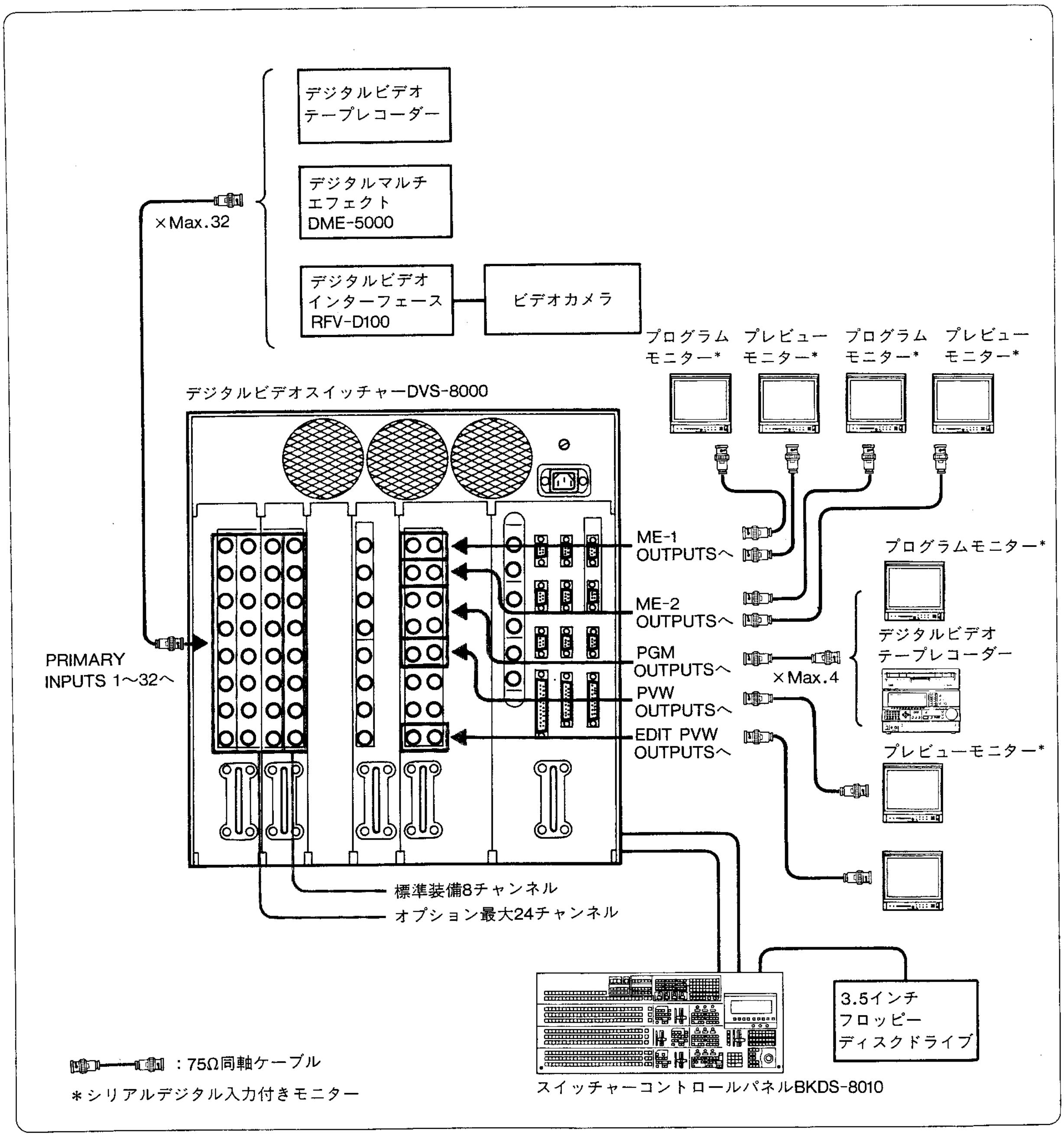
現在どの信号が選択されているかを外部に知らせるためのタリー信号を出力します。プライマリー入力1～32および内部クロマキー入力1、2、ME-1、ME-2などの選択状態を表示することができます。

1-3. システム構成例

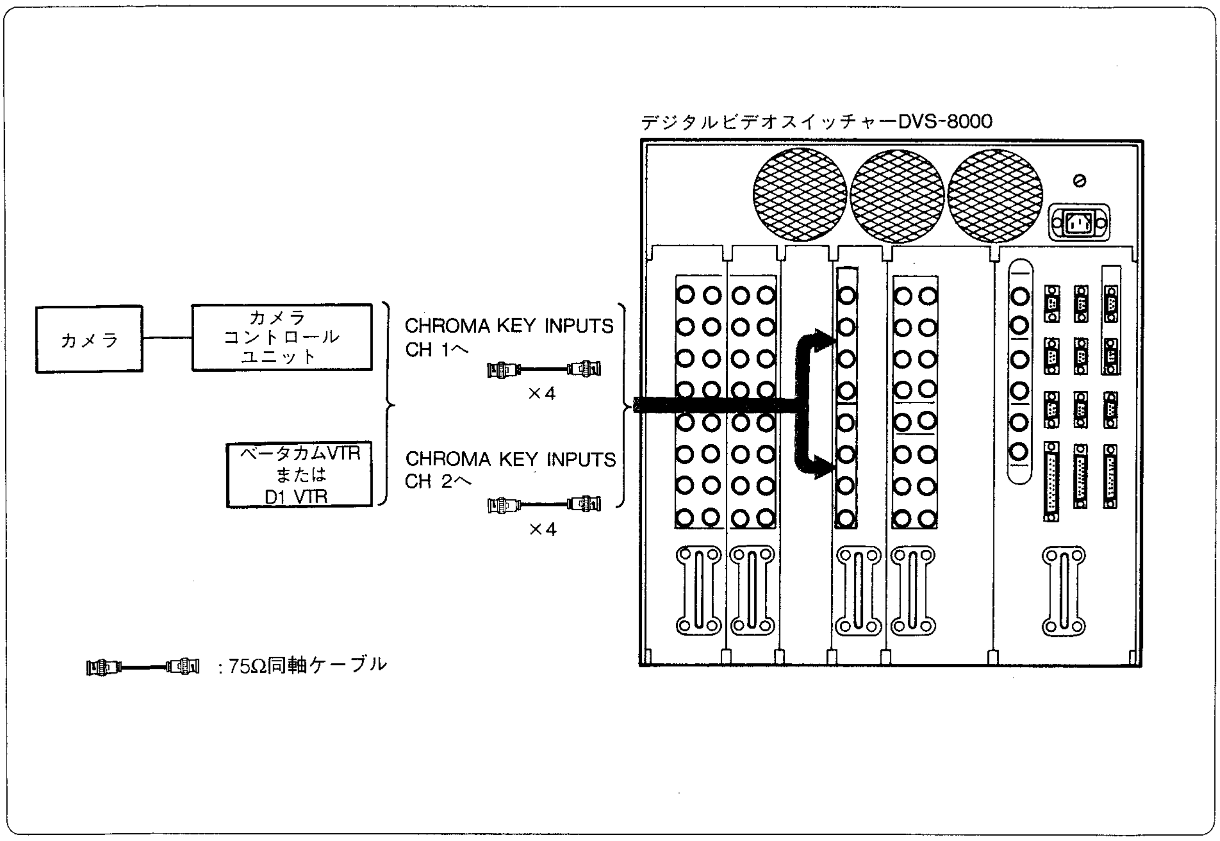
1-3-1. コントロールパネルとの接続


スイッチャーコントロールパネルBKDS-8010
SWITCHER CONTROLへ
FDDへ
外部同期信号入力
AC INへ
AC電源へ
50ピンケーブル
SWITCHER FDDへ
9ピンケーブル
3.5インチ フロッピー ディスク ドライブ
9ピンケーブル
外部同期信号入力
AC電源へ
CONTROL PANEL (CONTROL) へ
CONTROL PANEL (FDD) へ
デジタルビデオスイッチャーDVS-8000

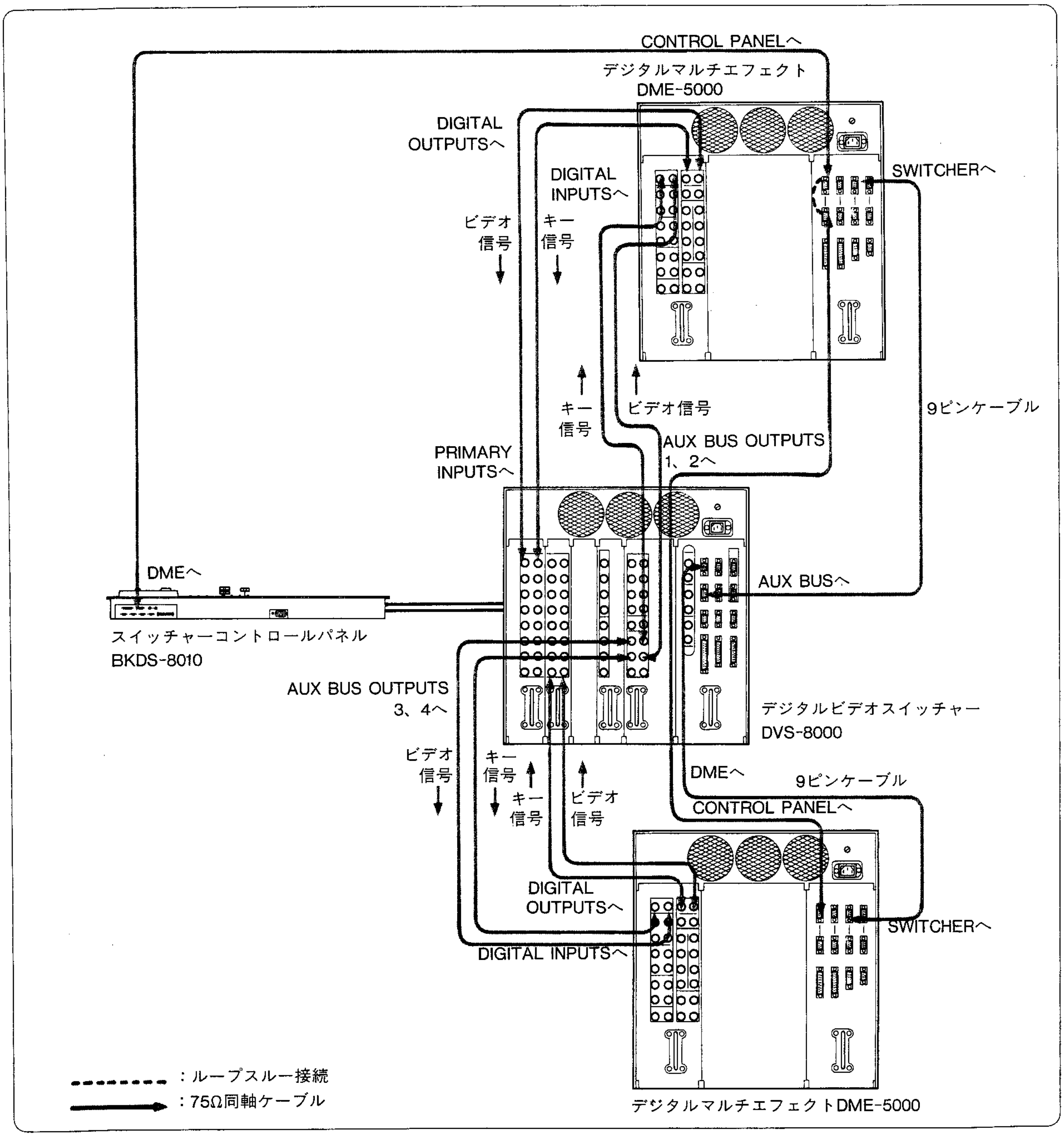
1-3-2. プライマリー入力とビデオモニターとの接続


デジタルビデオ
テープレコーダー
デジタルマルチ
エフェクト
DME-5000
デジタルビデオ
インターフェース
RFV-D100
ビデオカメラ
×Max.32
プログラム
モニター*
プレビュー
モニター*
プログラム
モニター*
プレビュー
モニター*
デジタルビデオスイッチャーDVS-8000
ME-1
OUTPUTSへ
ME-2
OUTPUTSへ
PGM
OUTPUTSへ
PVW
OUTPUTSへ
EDIT PVW
OUTPUTSへ
プログラムモニター*
デジタルビデオ
テープレコーダー
×Max.4
プレビューモニター*
PRIMARY
INPUTS 1〜32へ
標準装備8チャンネル
オプション最大24チャンネル
3.5インチ
フロッピー
ディスクドライブ
スイッチャーコントロールパネルBKDS-8010
：75Ω同軸ケーブル
*シリアルデジタル入力付きモニター

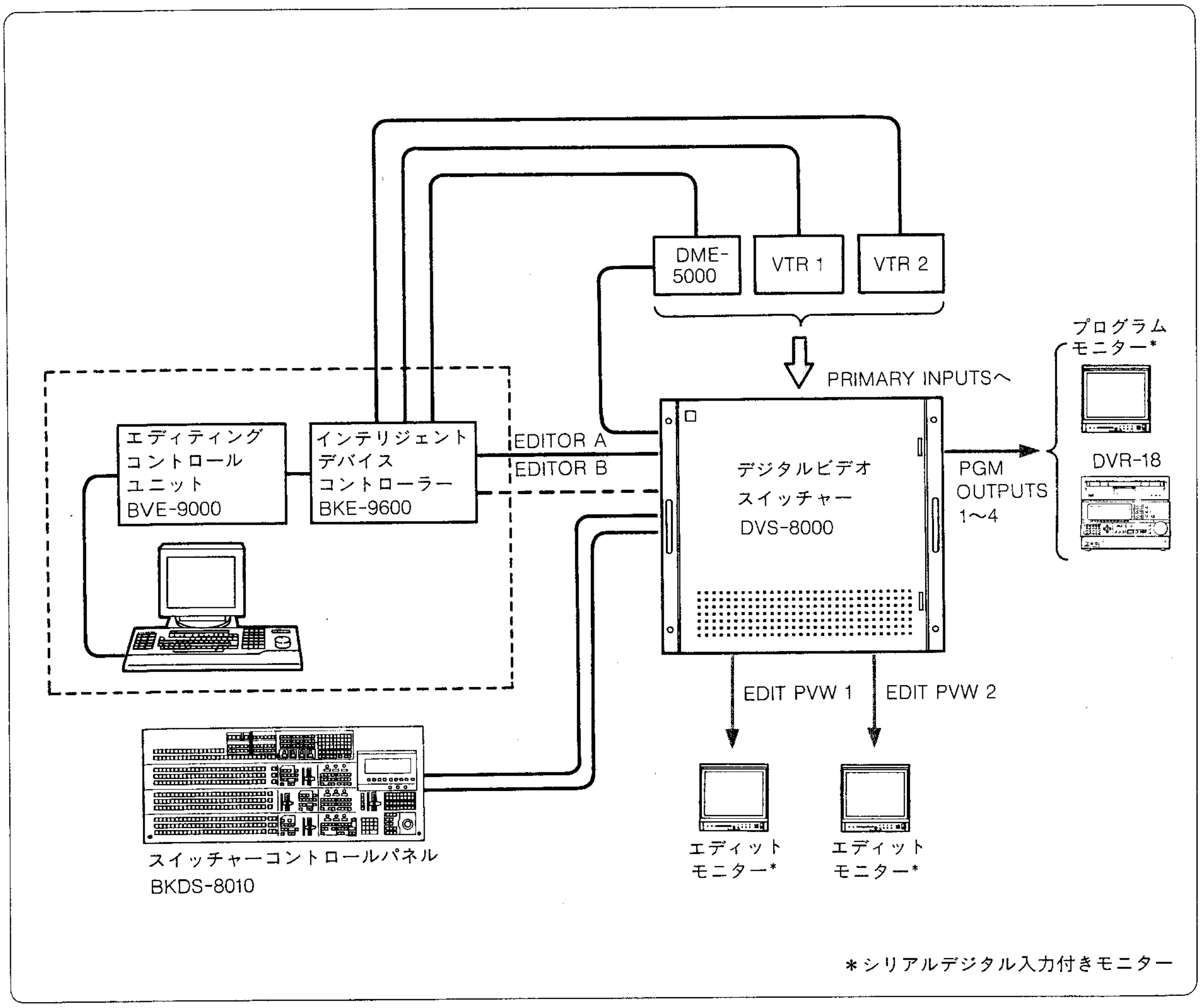
1-3-3. 外部クロマキーソースとの接続


デジタルビデオスイッチャーDVS-8000
カメラ
カメラ
コントロール
ユニット
ベータカムVTR
または
D1 VTR
CHROMA KEY INPUTS
CH 1へ
×4
CHROMA KEY INPUTS
CH 2へ
×4
：75Ω同軸ケーブル

1-3-4. デジタルマルチエフェクトDME-5000との接続


CONTROL PANELへ
デジタルマルチエフェクト
DME-5000
DIGITAL
OUTPUTSへ
DIGITAL
INPUTSへ
SWITCHERへ
ビデオ
信号
キー
信号
キー
信号
ビデオ信号
9ピンケーブル
AUX BUS OUTPUTS
1、2へ
PRIMARY
INPUTSへ
DMEへ
AUX BUSへ
スイッチャーコントロールパネル
BKDS-8010
AUX BUS OUTPUTS
3、4へ
デジタルビデオスイッチャー
DVS-8000
ビデオ
信号
キー
信号
キー
信号
ビデオ
信号
DMEへ
9ピンケーブル
CONTROL PANELへ
DIGITAL
OUTPUTSへ
SWITCHERへ
DIGITAL INPUTSへ
：ループスルー接続
：75Ω同軸ケーブル
デジタルマルチエフェクトDME-5000

1-3-5．エディティングコントロールシステムBVE-9000との接続


DME-5000
VTR 1
VTR 2
PRIMARY INPUTSへ
プログラムモニター*
DVR-18
エディティングコントロールユニット BVE-9000
インテリジェントデバイスコントローラー BKE-9600
EDITOR A
EDITOR B
デジタルビデオスイッチャー DVS-8000
PGM OUTPUTS 1～4
EDIT PVW 1
EDIT PVW 2
スイッチャーコントロールパネル BKDS-8010
エディットモニター*
エディットモニター*
＊シリアルデジタル入力付きモニター

1-4. 主な仕様

一般

電源	AC 90～132V、50/60Hz
消費電力	最大300W
温度範囲	5～40°C（動作） 10～35°C（性能）
外形寸法	424×443×450mm（幅／高さ／奥行き）（突起物を除く）
重量	50kg

入出力コネクター

PRIMARY INPUTS	シリアルデジタルビデオ信号入力　BNC型（×32） レベル：800mV±10%、75Ω リターンロス：15dB（5～270MHz） アナログコンポジットビデオ信号入力 (BKDS-8021基板使用時) レベル：0±3dB SC-H位相：0±30°
MONITOR OUT	アナログコンポジットビデオ信号出力、BNC型（×1） ビデオバンド幅：フラット～5.5MHz±0.5dB DG　1%、DP　1°
REF INPUT	アナログブラックバーストビデオ信号入力、BNC型（×2） ループスルー付き レベル：0±3dB SC-H位相：0°±30°
REF OUTPUT	アナログブラックバースト信号出力、BNC型（×1） レベル：　シンク：40±4 IRE バースト：40±4 IRE セットアップ：0 IRE SC-H位相：0°±10° 位相調整幅：±1H
CHROMA KEY INPUTS	アナログコンポーネント信号入力（BKDS-8030使用時） BNC型（×8） Y/B-Y/R-Y (ベータカム、SMPTE)、SYNC、 またはG/B/R、SYNC SYNC付きYまたはG入力／外部同期入力、切り換え可能 レベル：0±3dB

ME-1 OUTPUT PGM/PVW	シリアルデジタルビデオ信号出力、BNC型（×2）、75Ω レベル：800mV±10% 伝送速度：143Mbps
ME-2 OUTPUT PGM/PVW	シリアルデジタルビデオ信号出力、BNC型（×2）、75Ω レベル：800mV±10% 伝送速度：143Mbps
PGM OUTPUT	シリアルデジタルビデオ信号出力、BNC型（×4）、75Ω レベル：800mV±10% 伝送速度：143Mbps
PVW OUTPUT	シリアルデジタルビデオ信号出力、BNC型（×1）、75Ω レベル：800mV±10% 伝送速度：143Mbps
CLEAN OUTPUT	シリアルデジタルビデオ信号出力、BNC型（×1）、75Ω レベル：800mV±10% 伝送速度：143Mbps
AUX BUS OUTPUTS	シリアルデジタルビデオ信号出力、BNC型（×4）、75Ω レベル：800mV±10% 伝送速度：143Mbps
EDIT PVW OUTPUT 1、2	シリアルデジタルビデオ信号出力、BNC型（×2）、75Ω レベル：800mV±10% 伝送速度：143Mbps
AC IN	AC電源入力、3ピンACコネクター（×1）

システム位相

システム位相調整幅	-0.5~0H

リモートコントロール信号

CONTROL PANEL (CONTROL)	RS-422A信号規格準拠	D-SUB 9ピン
CONTROL PANEL (FDD)	RS-422A信号規格準拠	D-SUB 9ピン
EDITOR A	RS-422A信号規格準拠	D-SUB 9ピン
EDITOR B	RS-422A信号規格準拠	D-SUB 9ピン
DME	RS-422A信号規格準拠	D-SUB 9ピン
AUX BUS	RS-422A信号規格準拠	D-SUB 9ピン
SPARE	RS-422A信号規格準拠	D-SUB 9ピン
MATRIX	RS-422A信号規格準拠	D-SUB 9ピン
USER	RS-422A信号規格準拠	D-SUB 9ピン
TERMINAL	RS-232C信号規格準拠	D-SUB 25ピン
GPI	TTL入力×8 リレー接点出力 (AC/DC 最大30V、0.1A*)×7 D-SUB 25ピン	
TALLY	リレー接点出力 (AC/DC 最大30V、0.1A*)×36 D-SUB 50ピン	

＊抵抗負荷の場合

付属品

ラックアングル (1式) (本体に取り付け済み)
延長基板 (EX-209) (1)
電源コード (1)
電源コード用プラグアダプター (1)
75Ω終端器 (1)
オペレーション アンド メンテナンスマニュアル

別売り機器

スイッチャーコントロールパネル　BKDS-8010
デジタルインプットボード　BKDS-8020
アナログインプットボード　BKDS-8021
クリーンクロマキーボード　BKDS-8030
フレームメモリーボード　BKDS-8040
スペアパワーサプライユニット　BKDS-8090

関連機器

デジタルマルチエフェクト　DME-5000/9000
DME-5000用コントロールパネル　BKDM-5070
DME-9000用コントーローラーシステム　BKDM-9010
エディティングコントロールシステム　BVE-9000

本機の仕様および外観は、改良のため予告なく変更することがありますが、ご了承ください。

Manuals for the DVS-8000 Digital Video Switcher System

The DVS-8000 digital video switcher forms the processor component of a complete DVS-8000 switcher system, when used together with a BKDS-8010 switcher control panel.

The following manuals accompany the two products.

DVS-8000 operation and maintenance manual
(This manual. Supplied with the switcher.)
Section 1 "OPERATION" gives an overview of the DVS-8000 system, explains the parts of the switcher, and gives example system configurations. Personnel in charge of management of the overall video switcher system are required to read this section first. Section 2 and following sections cover system installation and maintenance. Consult them for regular maintenance requirements and also for error-finding in the event of a malfunction.

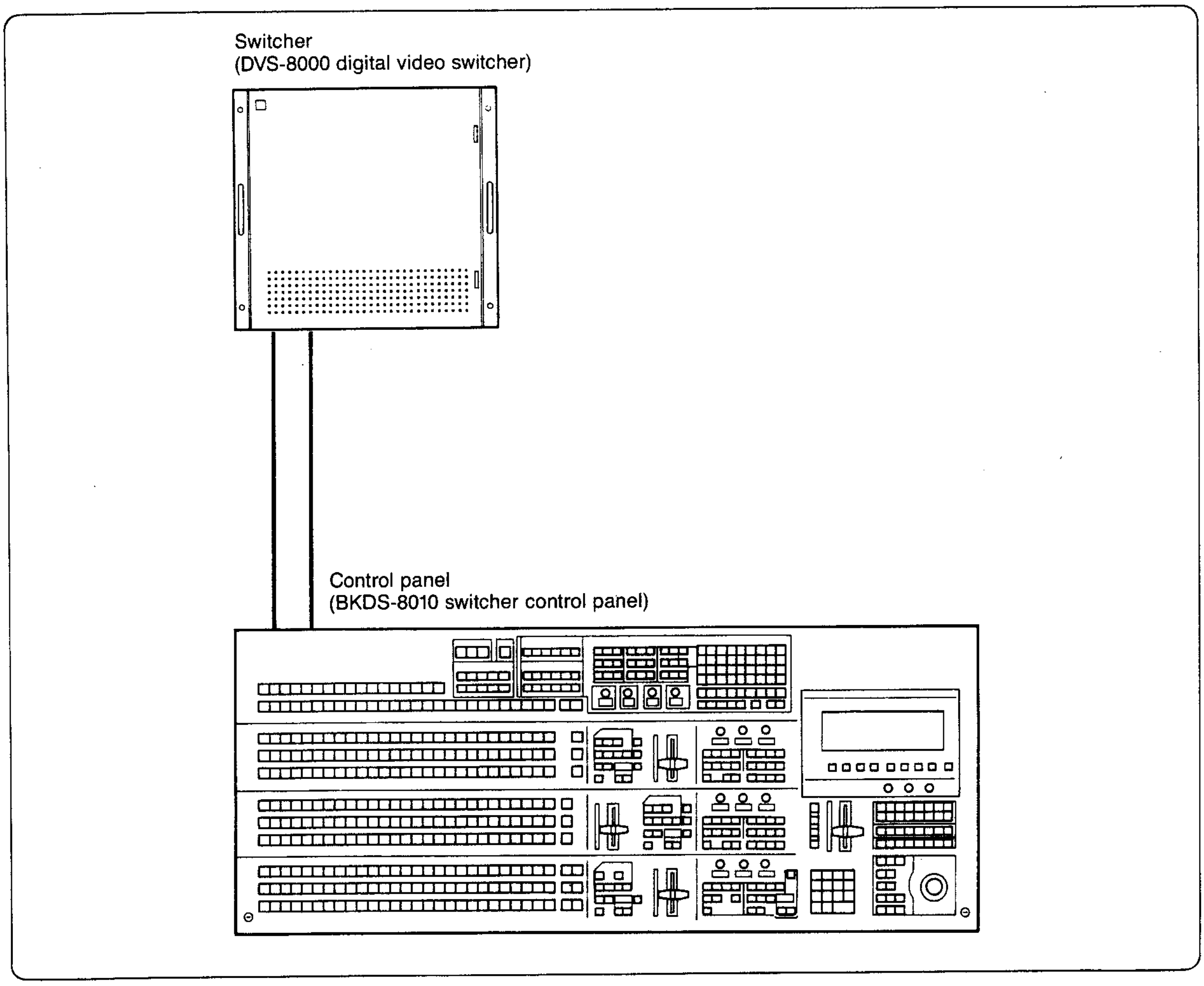
DVS-8000/8000C user guide
(Supplied with the control panel.)
This describes the parts of the control panel and explains how to use the DVS-8000 system—keep it handy for reference. Note that it also covers the use of the system with a DME-5000 digital multi effects when connected.

BKDS-8010 maintenance manual
(Supplied with the control panel.)
This describes the hardware of the control panel, and will be required for installation and maintenance.

Section 1 OPERATION

1-1. Overview

The DVS-8000 digital video switcher is a high performance switcher for D2 format, for use in broadcast studio and post- production systems. The switcher is normally operated from a BKDS-8010 Control Panel (supplied separately).
Note that section 1 of this manual uses the following terms to refer to the system components:
Switcher : DVS-8000 digital video switcher
Control panel: BKDS-8010 switcher control panel


Switcher
(DVS-8000 digital video switcher)
Control panel
(BKDS-8010 switcher control panel)

1-1-1. Principal Features

High picture quality and high stability ensured by completely digital processing
All internal processing of the serial digital input signals from video sources such as D2 format video tape recorders is digital, and the processed signals are output without conversion, as serial digital signals. The processing word length is 10 bits at I/O interfaces and a maximum of 14 bits internally, thus minimizing characteristic degradation of video signals. This ensures full exploitation of the greatest advantage of digital processing over analog—significantly higher picture quality—to produce really high level video effects.
Since the input unit is provided with a buffer memory, there is automatic phase correction to within ±0.5 H with respect to the reference signal, and even if the input signal carries some jitter, this can be stabilized.

Serial digital format for all I/O
All digital I/O is handled in serial form, so that it can be transmitted by a single 75 ohm coaxial cable. Making connections is much simpler than with a conventional parallel transmission system, and the overall complexity of the system is reduced. Furthermore, transmission distance can be much greater without significant degradation.

Primary input can be digital or analog
The switcher is supplied with eight channels of digital primary input as standard, and this can be increased to a maximum of 32 channels by adding optional BKDS-8020 board. To allow interfacing with existing analog systems, optional BKDS-8021 board for analog composite input is available.
Any of the input signals can be used for background, key fill or key source.

Operation with DME-5000
If the DME-5000 digital multi effects is connected, both the switcher and the DME-5000 can be controlled from the same control panel. Such combined operation called DME LINK® allows powerful operations such as DME wipe effects, which combine effects with the switcher wipe operation. The control panel provides interactive control of the switcher and the DME-5000 through a menu system.

Wide range of option boards
Many options are available, from extra primary input and analog composite signal input, to chroma keyer and frame memory. Each of these optional functions can be implemented simply by installing an extra board.

External interfaces
The switcher can be interfaced with a high-level editing system, such as a BVE-9000 editing control system, allowing data from the control panel to be stored, and providing a simulation function for key frame operations. Additionally, other devices such as matrix switchers, control terminals, tally devices or a PFV-D100 digital video interface can be connected as required.

LSI architecture
The high functionality of the switcher is implemented in LSI, for compactness and low power consumption.

Ease of maintenance

In the event of a fault, principal components of the unit, including the power supply, circuit boards and fan motor can be replaced from the front, to reduce downtime.

Variable resistors and switches on the boards have been kept to the minimum, using software control as far as possible. The optional BKDS-8090 spare power supply unit will further reduce downtime due to a fault of the power supply.

Powerful switcher functionality

The control panel has two M/E banks, each capable of controlling two separate keyers, and one PGM/PST bank capable of controlling a separate keyer. These keyers are provided with a powerful range of modifying functions, so that complicated video effects can be constructed step by step. The 3.5″ floppy disk drive, a standard accessory to the control panel, allows effects built in this way to be stored and repeated later. For more details see the user guide supplied with the control panel.

1-1-2. Important Notes

Fitting and removing circuit boards

Do not remove circuit boards unless absolutely necessary.
When fitting option boards or removing any board for maintenance, follow these guidelines.

- Ensure that the power of the switcher is turned off before fitting or removing boards. See page 1-6(E) for location of the power switch.
- Before turning the power on after fitting the board, ensure that the slot number indicated inside the switcher cabinet matches the one on the board fitted. For more details refer to 2-5-2 "Installation of Card Boards".

Failure to observe these precautions can lead to damage to the circuit.

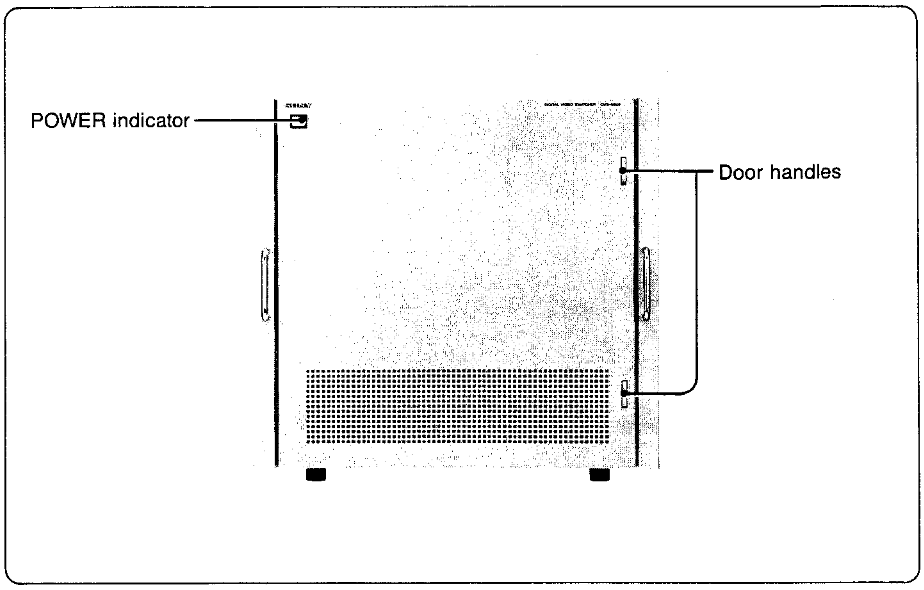
Circuit breaker

If an excessive current flows, the circuit breaker automatically cuts off the power. If the current is not drawn by putting the POWER switch in the ON position, open the front panel and press the white breaker button. Refer to page 1-6(E) for location of the breaker button.

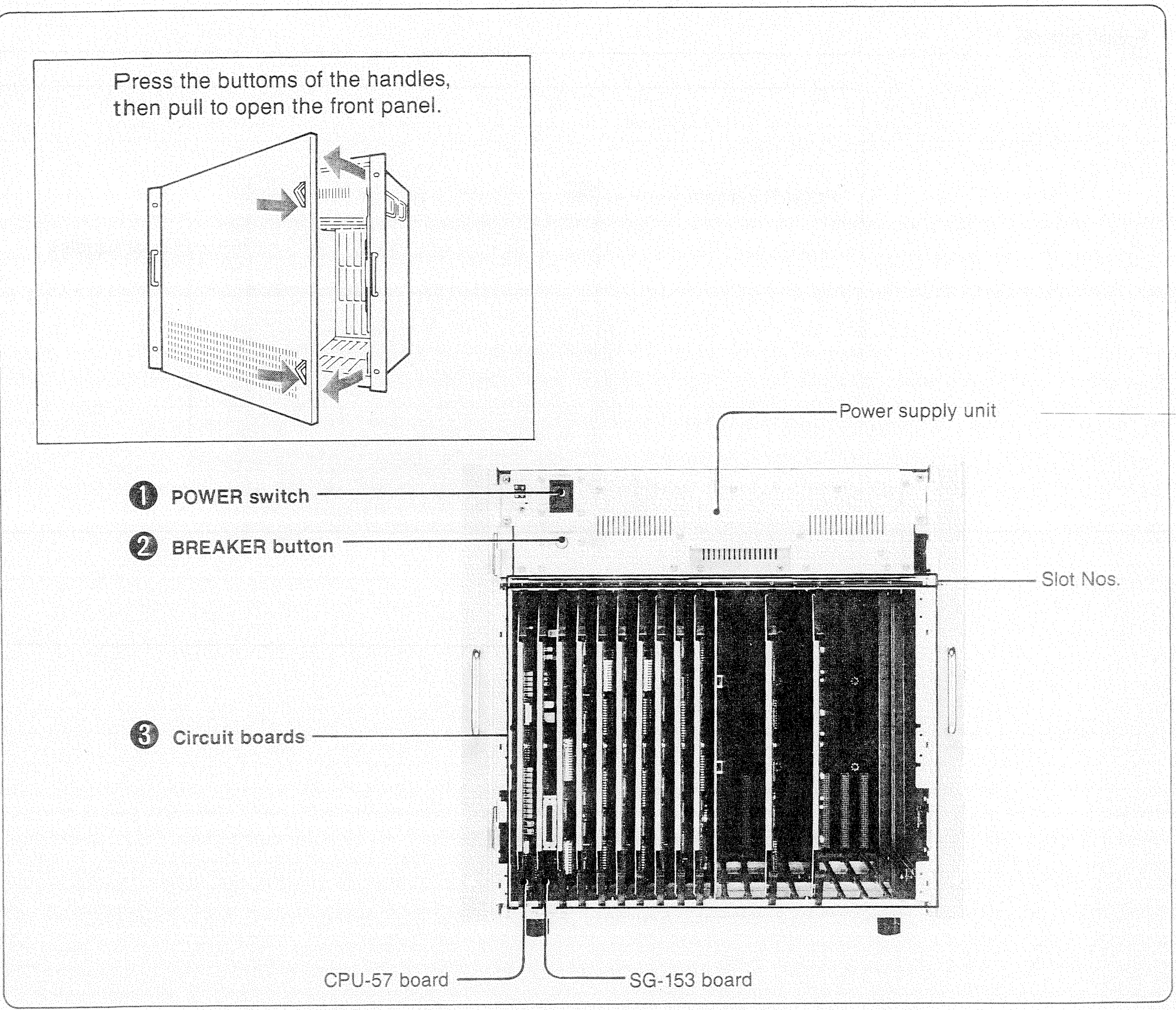
1-2. Location and Function of Parts

1-2-1. Front Panel and Interior

Front panel


POWER indicator
Door handles

Interior


Press the buttoms of the handles, then pull to open the front panel.

Power supply unit
❶ POWER switch
❷ BREAKER button
Slot Nos.
❸ Circuit boards
CPU-57 board
SG-153 board

❶ **POWER switch**
Powers the switcher on and off.

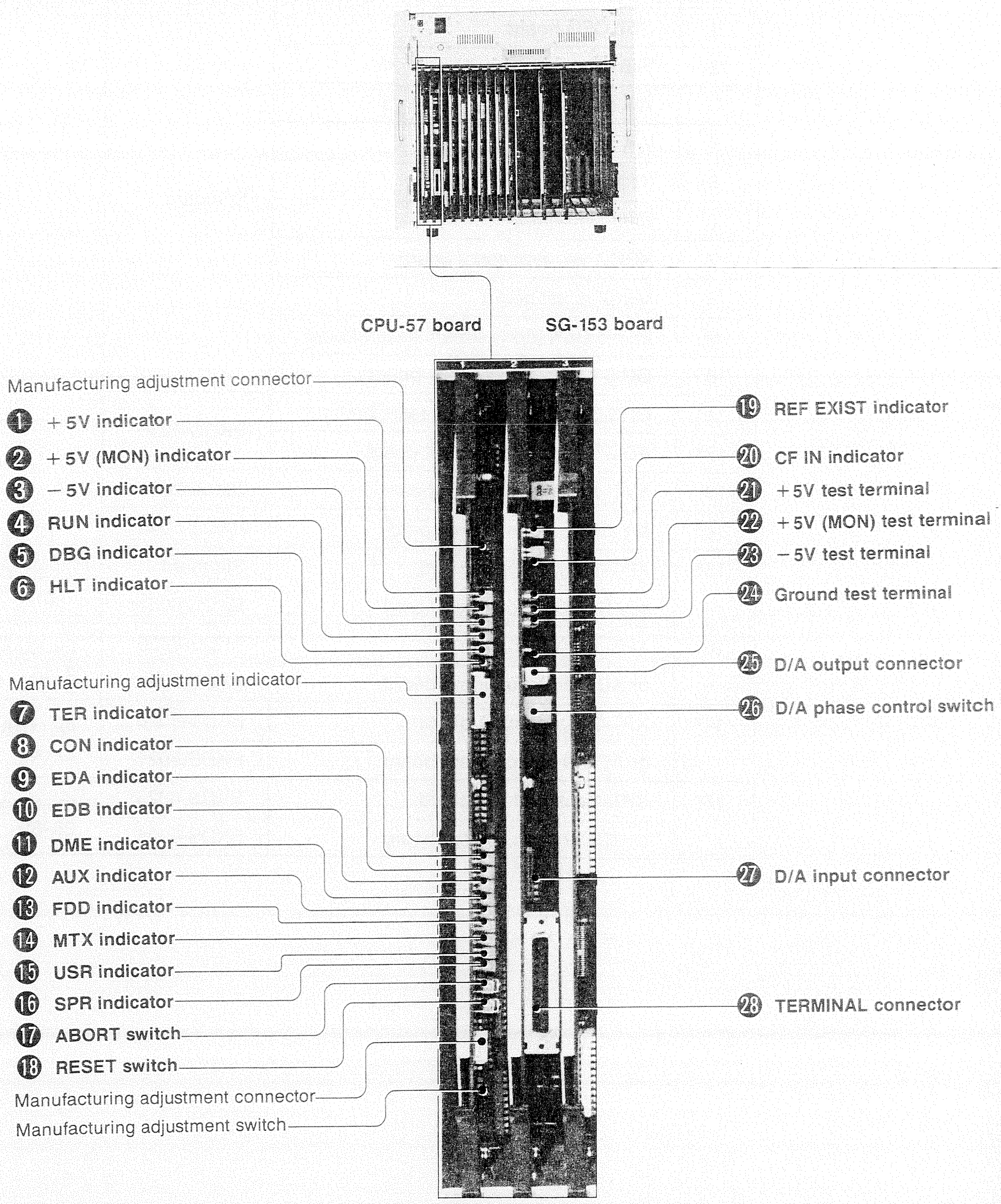
❷ **BREAKER button**
If the built-in breaker trips because of an excessive current in the unit, the power will be cut off and this button will jump out.

③ Circuit boards

The boards in the 18 slots are as follows. Slots for optional boards are marked with an asterisk.

Slot No.	Board name	Supplied as	Remarks
1	CPU-57 CPU board	Standard	
2	SG-153 sync generator board		
3	WKG-5 enhanced wipe board		
4	WKG-4 basic wipe board		
5	KPC-1 key processor board		
6	MIX-4 mixer board		
7	KPC-1 key processor board		
8	MIX-4 mixer board		
9	MIX-6 DSK (downstream keyer) board		
10	OUT-1 output processor board		
11*	CRK-5 chroma key processor board	BKDS-8030	
12*	ADC-5 chroma key input board		
13	MAT-1 matte generator board	Standard	
14*	MY-50 frame memory board	BKDS-8040	
15*	XPT-1 digital input board	Standard	for channels 1-8
	or ADC-9 analog input board	BKDS-8021	
16*	XPT-1 digital input board	BKDS-8020	for channels 9-16
	or ADC-9 analog input board	BKDS-8021	
17*	XPT-1 digital input board	BKDS-8020	for channels 17-24
	or ADC-9 analog input board	BKDS-8021	
18*	XPT-1 digital input board	BKDS-8020	for channels 25-32
	or ADC-9 analog input board	BKDS-8021	

The CPU-57 and SG-153 boards have indicators for showing switcher operation statuses and components for adjustments and tests, mounted on the side facing the front panel. These components are described below.


CPU-57 board
SG-153 board
Manufacturing adjustment connector
❶ +5V indicator
❷ +5V (MON) indicator
❸ −5V indicator
❹ RUN indicator
❺ DBG indicator
❻ HLT indicator
Manufacturing adjustment indicator
❼ TER indicator
❽ CON indicator
❾ EDA indicator
❿ EDB indicator
⓫ DME indicator
⓬ AUX indicator
⓭ FDD indicator
⓮ MTX indicator
⓯ USR indicator
⓰ SPR indicator
⓱ ABORT switch
⓲ RESET switch
Manufacturing adjustment connector
Manufacturing adjustment switch
⓳ REF EXIST indicator
⓴ CF IN indicator
(21) +5V test terminal
(22) +5V (MON) test terminal
(23) −5V test terminal
(24) Ground test terminal
(25) D/A output connector
(26) D/A phase control switch
(27) D/A input connector
(28) TERMINAL connector

❶ **+5V indicator (green)**
When this indicator is on, it indicates that the +5 V power to slots 1 to 9 is being supplied normally. It goes off if the fuse F1 on the CPU-57 board blows, or the power supply has failed.

❷ **+5V (MON) indicator (green)**
When this indicator is on, it indicates that the +5 V power to slots 10 to 18 is being supplied normally. It goes off if the +5 V power supply has failed.

❸ **−5V indicator (green)**
When this indicator is on, it indicates that the −5 V power for the whole system is being supplied normally. It goes off if the fuse F2 on the CPU-57 board blows, or if the +5 V power supply has failed.

❹ **RUN indicator (green)**
This indicator is on when the CPU is operating normally and off when it is halted.

❺ **DBG (debugging) indicator (green)**
This indicator is only used for adjustment during manufacture.

❻ **HLT (halt) indicator (red)**
This indicator is on when the CPU is halted.

❼ **to ⓰ Communications status indicators (green)**
These indicators show the status of the connectors on the rear panel. Each one lights intermittently when data is being input from the corresponding line. The correspondence between indicators and connectors is shown in the following table.

No.	Indicator	Connector
7	TER	TERMINAL
8	CON	CONTROL PANEL (CONTROL)
9	EDA	EDITOR A
10	EDB	EDITOR B
11	DME	DME
12	AUX	AUX BUS
13	FDD	CONTROL PANEL (FDD)
14	MTX	MATRIX
15	USR	USER
16	SPR	SPARE

⓱ **ABORT switch**
This switch is only used for adjustment during manufacture.

⓲ **RESET switch**
This switch re-initializes the system.

⓳ **REF EXIST indicator (green)**
This indicator is on when a black burst signal (or equivalent) is input to the REF INPUT connector on the rear panel.

⑳ **CF IN (color frame input) indicator (green)**
This indicator shows whether the SC-H phase of the input reference signal is correct. It lights when the SC-H phase is within ±20°, thus guaranteeing phase correctness of the video signal.

㉑ **+5V test terminal (red)**
Use this terminal to check the +5 V supply to slots 1 to 9. Adjustment of the power supply may be necessary when installing the switcher, or when adding optional boards.

㉒ **+5V (MON) test terminal (red)**
Use this terminal to check the +5 V supply to slots 10 to 18. Adjustment of the power supply may be necessary when installing the switcher, or when adding optional boards.

㉓ **−5V test terminal (blue)**
Use this terminal to check the −5 V supply to the whole system. Adjustment of the power supply may be necessary when installing the switcher, or when adding optional boards.

㉔ **Ground test terminal (black)**
This is the return connector when testing any of the terminals ㉑ to ㉓.

㉕ **D/A output connector**
The digital signal input to the D/A input connector ㉗ is converted to an analog signal which is output from this connector. Use for circuit adjustment purposes.

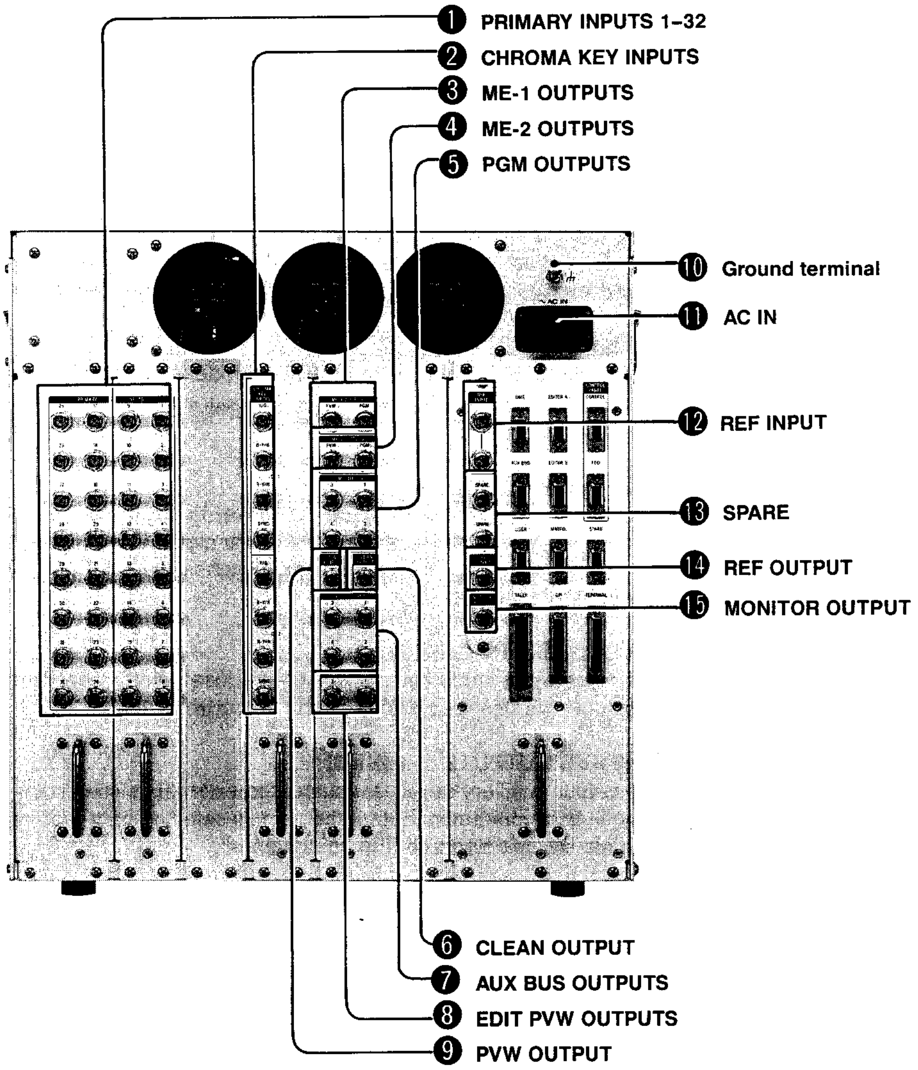
㉖ **D/A phase control switch**
This adjusts the clock phase for D/A conversion of the signal input to the D/A input connector ㉗.

㉗ **D/A input connector**
Connect this to the digital TP connector on one of the boards with a flexible cable, to input the digital signal. It will be converted and output as an analog signal from the D/A output connector ㉕.

㉘ **TERMINAL connector**
Connect this to the control terminal, to use for initial settings or for maintenance. It complies with the RS-232C standard, and is connected in parallel with the TERMINAL connector on the rear panel.

1-2-2. Rear Panel

Connectors


❶ PRIMARY INPUTS 1-32
❷ CHROMA KEY INPUTS
❸ ME-1 OUTPUTS
❹ ME-2 OUTPUTS
❺ PGM OUTPUTS
❿ Ground terminal
⓫ AC IN
⓬ REF INPUT
⓭ SPARE
⓮ REF OUTPUT
⓯ MONITOR OUTPUT
❻ CLEAN OUTPUT
❼ AUX BUS OUTPUTS
❽ EDIT PVW OUTPUTS
❾ PVW OUTPUT

❶ **PRIMARY INPUTS 1-32 (BNC)**
These are connectors for the serial digital signals. Eight channels are provided as standard, and this can be increased by adding BKDS-8020 or BKDS-8021 option boards up to the maximum of 32 channels. If a BKDS-8021 option board is installed, analog video signals can also be input.

❷ **CHROMA KEY INPUTS (BNC)**
These connectors input external chroma key source and synchronizing signals if a BKDS-8030 option board is installed. The input signal format is analog component video (Y/B-Y/R-Y with sync or G/B/R with SYNC). The two input channels can be used as both background and foreground signals (clean chroma key function).

❸ **ME-1 OUTPUTS (BNC)**
These connectors output the video currently being produced on the M/E-1 bank of the control panel as a serial digital video signal. Connect the PGM connector to a program monitor to view the currently produced video. Connect PVW to a preview monitor to check the picture which will be output from the PGM connector after the transition.

❹ **ME-2 OUTPUTS (BNC)**
These connectors output the video currently being produced on the M/E-2 bank of the control panel as a serial digital video signal. Again program and preview connectors are provided.

❺ **PGM (program) OUTPUTS (BNC)**
These connectors output the video currently being produced on the PGM/PST (program/preset) bank of the control panel as a serial digital video signal. There are four connectors, which are the final output from the switcher. Connect program monitors or video tape recoders as required.

❻ **CLEAN (clean feed) OUTPUT (BNC)**
This connector outputs the video currently being produced on the program/preset bank but not yet subject to the final processing by the downstream keyer.

❼ **AUX (auxiliary) BUS OUTPUTS 1-4 (BNC)**
The switcher has four auxiliary buses, for outputs to external devices such as effects processors. These four connectors output the signals selected on the corresponding buses. The signals are selected from the control panel.

❽ **EDIT PVW (preview) OUTPUTS 1-2 (BNC)**
These two connectors output the signal selected from the control panel as output on the preview bus. When controlling the switcher from an editor, for example, you can use this as a monitor output. The two connectors output the same signal. The same signal is also output as an analog signal from the MONITOR OUTPUT connector ⓯.

❾ **PVW (preview) OUTPUT (BNC)**
This connector outputs the video which will be output from the PGM OUTPUTS connectors ❺ after the effects transition on the PGM/PST bank of the control panel. Connected to a preview monitor it allows you to check the final video output.

❿ **Ground terminal**
Connect to system ground.

⓫ **AC IN**
Connect to a 90 V to 132 V AC supply with the supplied power cord.

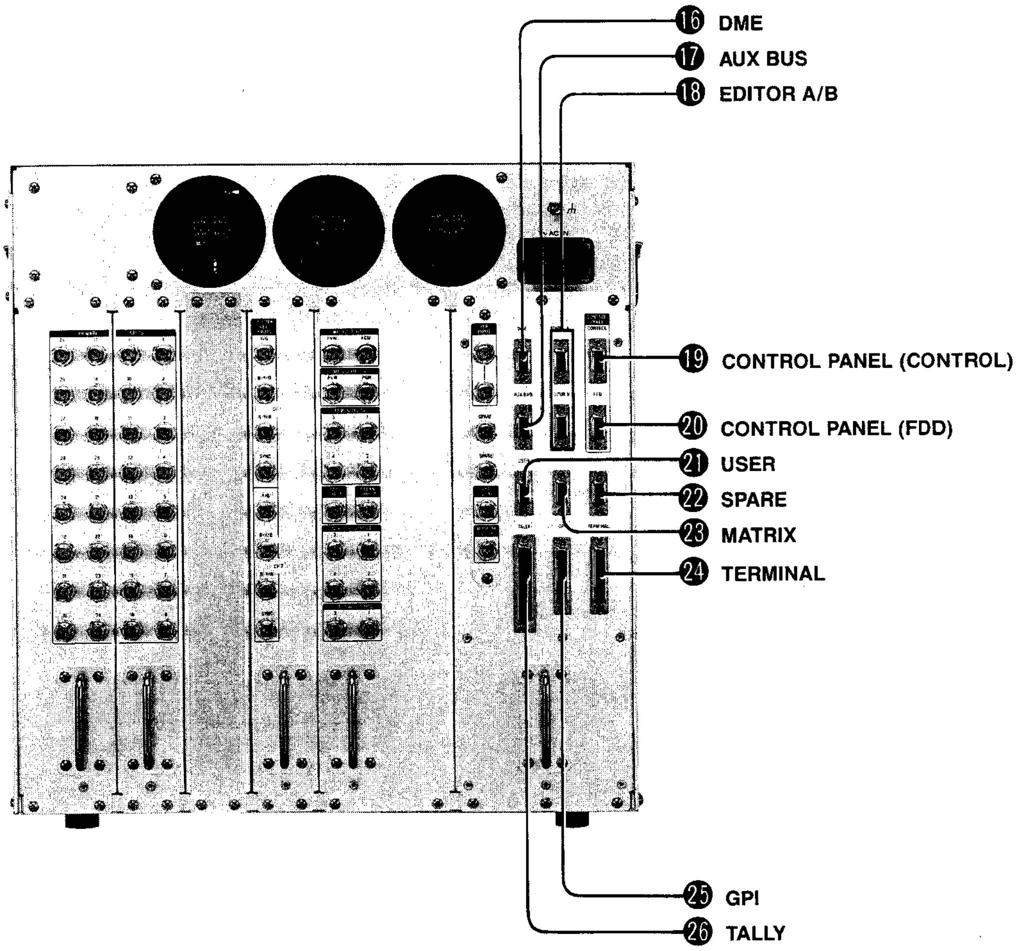
⑫ **REF (reference video) INPUT (BNC)**
These are loop-through connectors for the analog reference video signal input (black burst signal), when using an external synchronizing signal with the switcher. Connect the input to either of the connectors, and the other serves as a loop-through output. If not using the loop-through output, always connect the 75 ohm terminator (supplied as an accessory) to the other connector.

⑬ **SPARE (BNC)**
These connectors are not currently used.

⑭ **REF (reference video) OUTPUT (BNC)**
This connector outputs an analog reference video signal (black burst signal). The phase of this reference signal with respect to the reference signal input to the REF INPUT connector ⑫ can be adjusted within a range of ±1 H from the control panel.

⑮ **MONITOR OUTPUT (BNC)**
This connector provides an analog signal from the preview bus, which is otherwise the same as the signal from the EDIT PVW OUTPUTS connectors ⑧.

Interface connectors


⑯ DME
⑰ AUX BUS
⑱ EDITOR A/B
⑲ CONTROL PANEL (CONTROL)
⑳ CONTROL PANEL (FDD)
㉑ USER
㉒ SPARE
㉓ MATRIX
㉔ TERMINAL
㉕ GPI
㉖ TALLY

⑯ **DME (digital multi effects) (D-SUB 9-pin)**
Connect to the DME-5000. It complies with RS-422A.

⑰ **AUX (auxiliary) BUS (D-SUB 9-pin)**
Connect to the DME-5000 for control of the four auxiliary buses (AUX 1–4) built-in to the switcher. It complies with RS-422A.

⑱ **EDITOR A/B (D-SUB 9-pin)**
Connect to external devices such as a BVE-9000 editing control system, so that the switcher can be controlled from an editor. EDITOR A is provided for normal use and EDITOR B for function expansion.

⑲ **CONTROL PANEL (CONTROL) (D-SUB 9-pin)**
This connector is for connection to a control panel such as a BKDS-8010. It allows the control panel to operate all the functions of the switcher, and complies with RS-422A.

⑳ **CONTROL PANEL (FDD) (floppy disk drive) (D-SUB 9-pin)**
Connected to a control panel such as a BKDS-8010, this gives the switcher access to the floppy disk drive connected to the control panel. It complies with RS-422A.

㉑ **USER (D-SUB 9-pin)**
This is for future system expansion. It complies with RS-422A.

㉒ **SPARE (D-SUB 9-pin)**
This RS-422A connector is a spare control connector, only used in the factory.

㉓ **MATRIX (D-SUB 9-pin)**
This is for connection to an external matrix switcher. It complies with RS-422A.

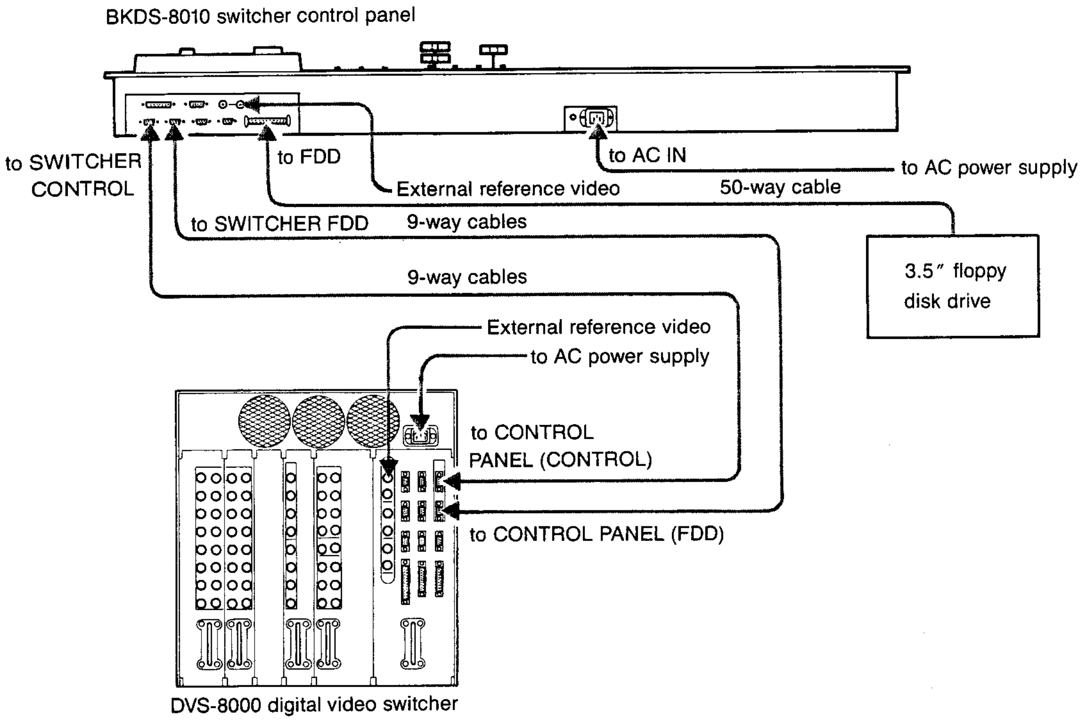
㉔ **TERMINAL (D-SUB 25-pin)**
This is for connection to a control terminal, complying with RS-232C. It is used for initialization and maintenance of the switcher, and is connected in parallel with the TERMINAL connector on the SG-153 board installed in the switcher.

㉕ **GPI (general purpose I/O) (D-SUB 25-pin)**
Connected to an external device, this connector allows trigger signals to be input and output. There are 8 inputs and 7 outputs, and control of the I/O conditions for these is programmable.

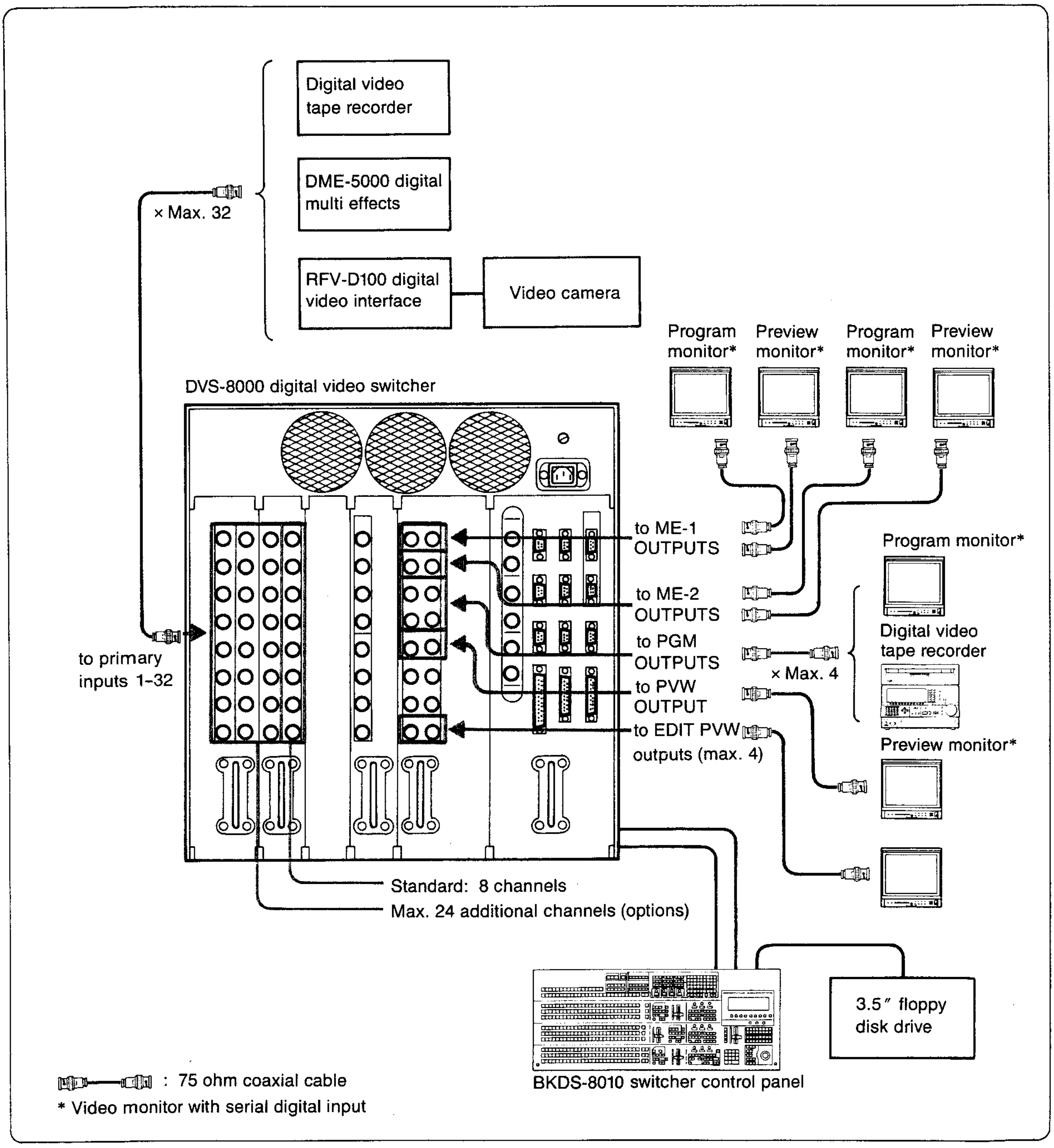
㉖ **TALLY (D-SUB 50-pin)**
This outputs tally signals showing which signals are currently selected, including the state of all 32 primary inputs, internal chroma key inputs 1 and 2, and M/E-1 and M/E-2 banks.

1-3. System Configuration Examples

1-3-1. Control Panel Connections

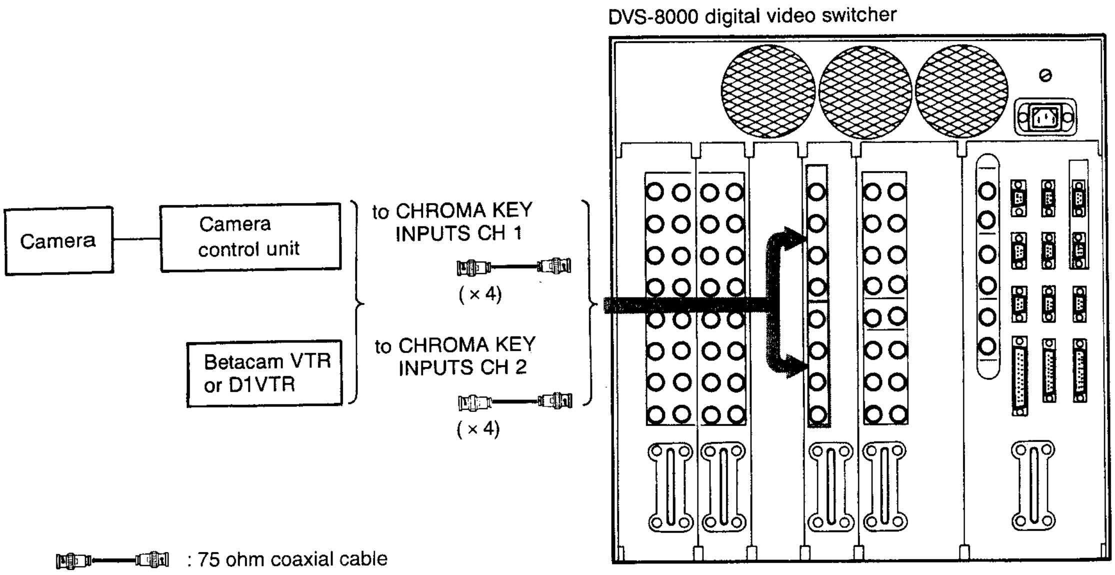

BKDS-8010 switcher control panel
to SWITCHER CONTROL
to FDD
to AC IN
to AC power supply
External reference video
50-way cable
to SWITCHER FDD
9-way cables
3.5″ floppy disk drive
9-way cables
External reference video
to AC power supply
to CONTROL PANEL (CONTROL)
to CONTROL PANEL (FDD)
DVS-8000 digital video switcher

1-3-2. Primary Input and Video Monitor Connections

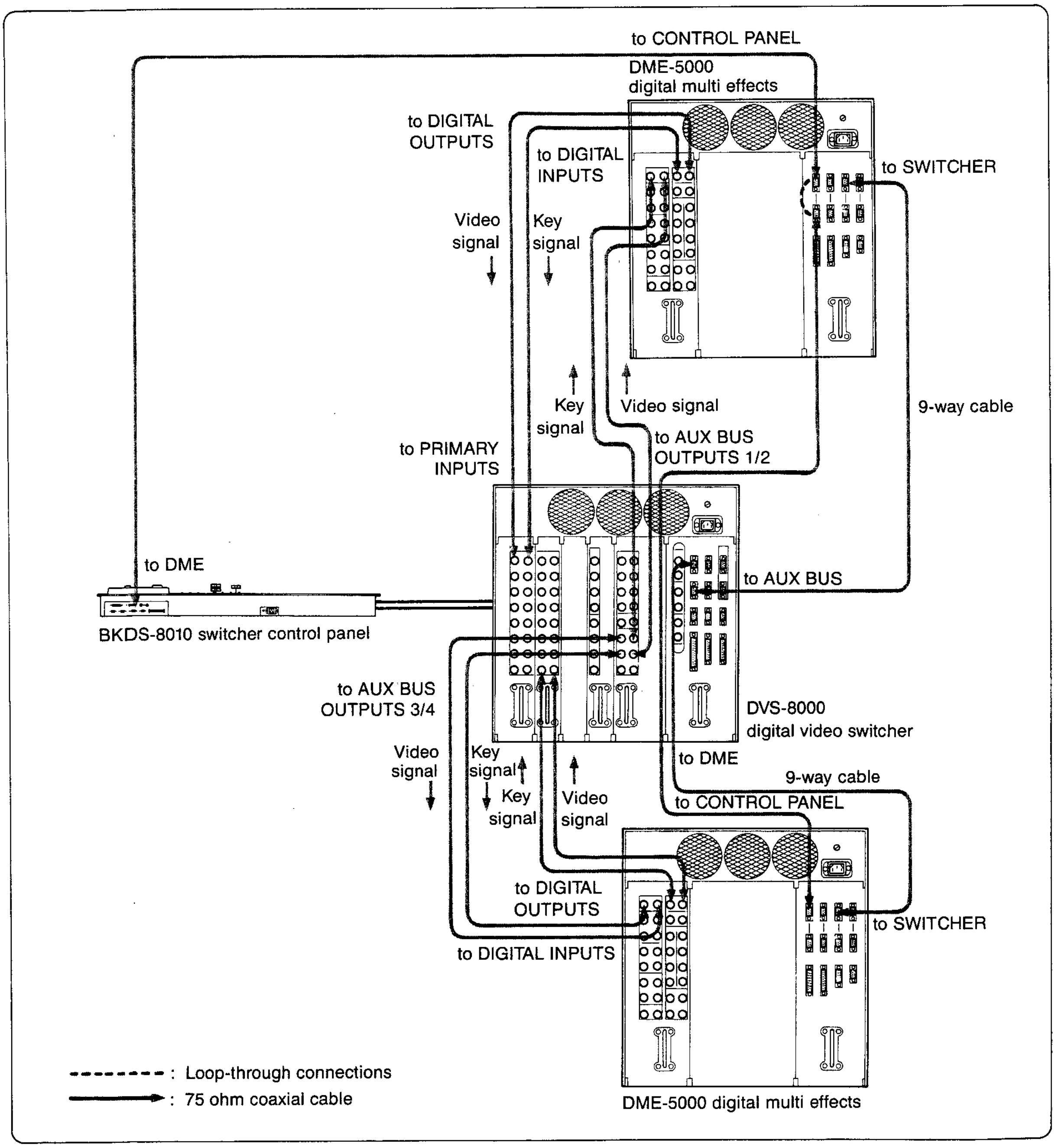


Digital video tape recorder
DME-5000 digital multi effects
RFV-D100 digital video interface
Video camera
× Max. 32
DVS-8000 digital video switcher
to primary inputs 1-32
Program monitor*
Preview monitor*
Program monitor*
Preview monitor*
to ME-1 OUTPUTS
to ME-2 OUTPUTS
to PGM OUTPUTS
to PVW OUTPUT
to EDIT PVW outputs (max. 4)
Program monitor*
Digital video tape recorder
× Max. 4
Preview monitor*
Standard: 8 channels
Max. 24 additional channels (options)
3.5″ floppy disk drive
BKDS-8010 switcher control panel
: 75 ohm coaxial cable
* Video monitor with serial digital input

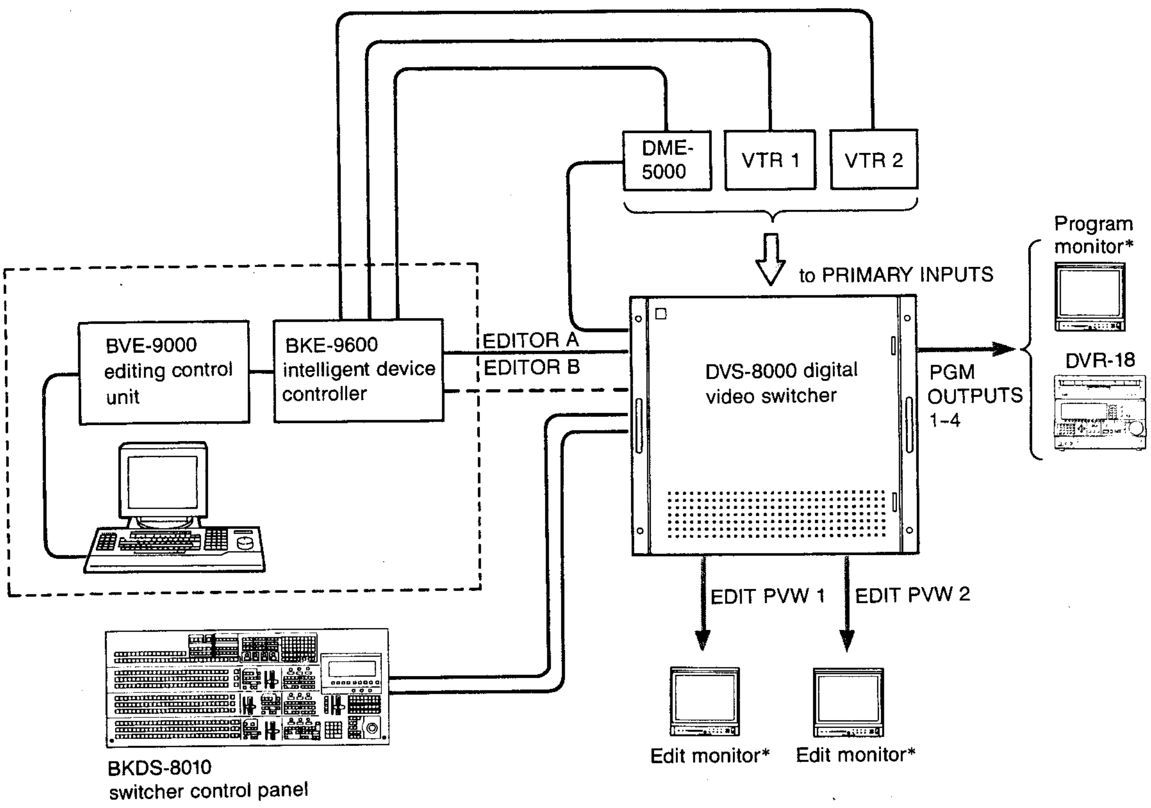
1-3-3. External Chroma Key Source Connections


DVS-8000 digital video switcher
Camera
Camera control unit
to CHROMA KEY INPUTS CH 1
(× 4)
Betacam VTR or D1VTR
to CHROMA KEY INPUTS CH 2
(× 4)
: 75 ohm coaxial cable

1-3-4. DME-5000 Digital Multi Effects Connections


to CONTROL PANEL
DME-5000
digital multi effects
to DIGITAL
OUTPUTS
to DIGITAL
INPUTS
to SWITCHER
Video
signal
Key
signal
Key
signal
Video signal
9-way cable
to PRIMARY
INPUTS
to AUX BUS
OUTPUTS 1/2
to DME
to AUX BUS
BKDS-8010 switcher control panel
to AUX BUS
OUTPUTS 3/4
DVS-8000
digital video switcher
Video
signal
Key
signal
Key
signal
Video
signal
to DME
9-way cable
to CONTROL PANEL
to DIGITAL
OUTPUTS
to DIGITAL INPUTS
to SWITCHER
- - - - - - - - : Loop-through connections
———▶ : 75 ohm coaxial cable
DME-5000 digital multi effects

1-3-5. BVE-9000 Editing Control System Connections


DME-5000
VTR 1
VTR 2
to PRIMARY INPUTS
Program monitor*
DVR-18
BVE-9000 editing control unit
BKE-9600 intelligent device controller
EDITOR A
EDITOR B
DVS-8000 digital video switcher
PGM OUTPUTS 1-4
EDIT PVW 1
EDIT PVW 2
Edit monitor*
Edit monitor*
BKDS-8010 switcher control panel

* Video monitor with special digital input

1-4. Principal Specifications

General

Power supply	90 to 132 V AC, 50/60 Hz
Power consumption	Maximum 300 W
Temperature range	Operating: 5 to 40°C (41 to 104°F) Performance guaranteed: 10 to 35°C (50 to 95°F)
Dimensions (w/h/d, excluding projections)	Approx. 424 × 443 × 450 mm (16¾ × 17½ × 17¾ inches)
Weight	Approx. 50 kg (110 lb 4 oz)

Input/output connectors

PRIMARY INPUTS	Serial digital video signal inputs, BNC (× 32) Level: 800 mV ±10%, 75 ohm Return loss: 15 dB (5 to 270 MHz) Analog composite video signal inputs (with BKDS-8021 installed) Level: 0 ±3 dB SC-H phase: 0 ±30°
MONITOR OUT	Analog composite video signal output, BNC (× 1) Video bandwidth: flat to 5.5 MHz ±0.5 dB DG 1%, DP 1°
REF INPUT	Analog black burst video signal input, BNC (× 2) loop-through Level: 0 ±3 dB SC-H phase: 0 ±30°
REF OUTPUT	Analog black burst signal output, BNC (× 1) Level: sync: 40 ±4 IRE burst: 40 ± 4 IRE set-up: 0 IRE SC-H phase: 0 ±10° Phase adjustment: ±1 H
CHROMA KEY INPUTS	Analog component signal input (with BKDS-8030 installed), BNC (× 8) Y/B-Y/R-Y with SYNC, or G/B/R with SYNC Switchable for Y or G input with sync, or external sync input Level: 0 ±3 dB
ME-1 OUTPUT PGM/PVW	Serial digital video signal outputs, BNC (× 2), 75 ohm Level: 800 mV ±10% Transmission rate: 143 Mbps
ME-2 OUTPUT PGM/PVW	Serial digital video signal outputs, BNC (× 2), 75 ohm Level: 800 mV ±10% Transmission rate: 143 Mbps
PGM OUTPUTS	Serial digital video signal outputs, BNC (× 4), 75 ohm Level: 800 mV ±10% Transmission rate: 143 Mbps
PVW OUTPUT	Serial digital video signal output, BNC (× 1), 75 ohm Level: 800 mV ±10% Transmission rate: 143 Mbps
CLEAN OUTPUT	Serial digital video signal output, BNC (× 1), 75 ohm Level: 800 mV ±10% Transmission rate: 143 Mbps
AUX BUS OUTPUTS	Serial digital video signal outputs, BNC (× 4), 75 ohm Level: 800 mV ±10% Transmission rate: 143 Mbps

EDIT PVW OUTPUT 1/2	Serial digital video signal outputs, BNC (× 2), 75 ohm Level: 800 mV ±10% Transmission rate: 143 Mbps
AC IN	AC power supply, 3-pin AC connector (× 1)

System phase

System phase adjustment	–0.5H to 0H

Remote control signals

CONTROL PANEL (CONTROL)	Complies with RS-422A, D-SUB 9-pin
CONTROL PANEL (FDD)	Complies with RS-422A, D-SUB 9-pin
EDITOR A	Complies with RS-422A, D-SUB 9-pin
EDITOR B	Complies with RS-422A, D-SUB 9-pin
DME	Complies with RS-422A, D-SUB 9-pin.
AUX BUS	Complies with RS-422A, D-SUB 9-pin
SPARE	Complies with RS-422A, D-SUB 9-pin
MATRIX	Complies with RS-422A, D-SUB 9-pin
USER	Complies with RS-422A, D-SUB 9-pin
TERMINAL	Complies with RS-232C, D-SUB 25-pin
GPI	TTL inputs × 8 Relay contact outputs (max. 30 V AC/DC, 0.1 A*) × 7 D-SUB 25-pin
TALLY	Relay contact outputs (max. 30 V AC/DC, 0.1 A*) × 36 D-SUB 50-pin

* For resistive load

Standard accessories

Rack mounting angles (fitted to the switcher) (1set)
Expansion board (EX-209) (1)
Power cord (1)
Adaptor (2-pin) for power cord (1)
75 ohm terminator (1)
Operation and maintenance manual (1)

Accessories supplied separately

BKDS-8010 switcher control panel
BKDS-8020 digital input board
BKDS-8021 analog input board
BKDS-8030 clean chroma key board
BKDS-8040 frame memory board
BKDS-8090 spare power supply unit

Related equipment

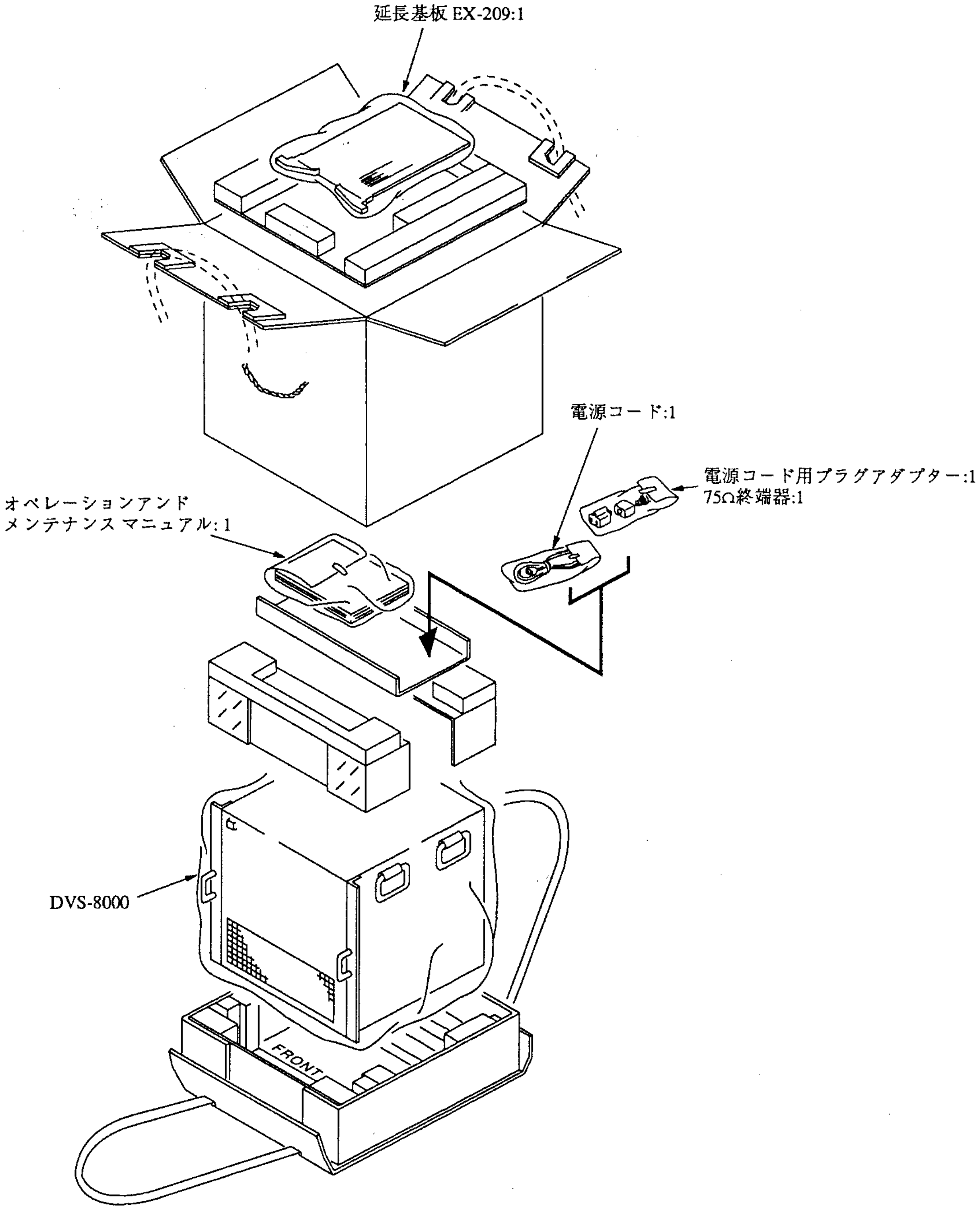
DME-5000/9000 digital multi effects
BKDM-5070 control panel for DME-5000
BKDM-9010 controller system for DME-9000
BVE-9000 editing control system

Design and specifications are subject to change without notice.

(2)

第2章
設　置

2-1. 開梱と再梱包


延長基板 EX-209:1
電源コード:1
電源コード用プラグアダプター:1
75Ω終端器:1
オペレーションアンド
メンテナンス マニュアル:1
DVS-8000
FRONT

2-2. 使用環境

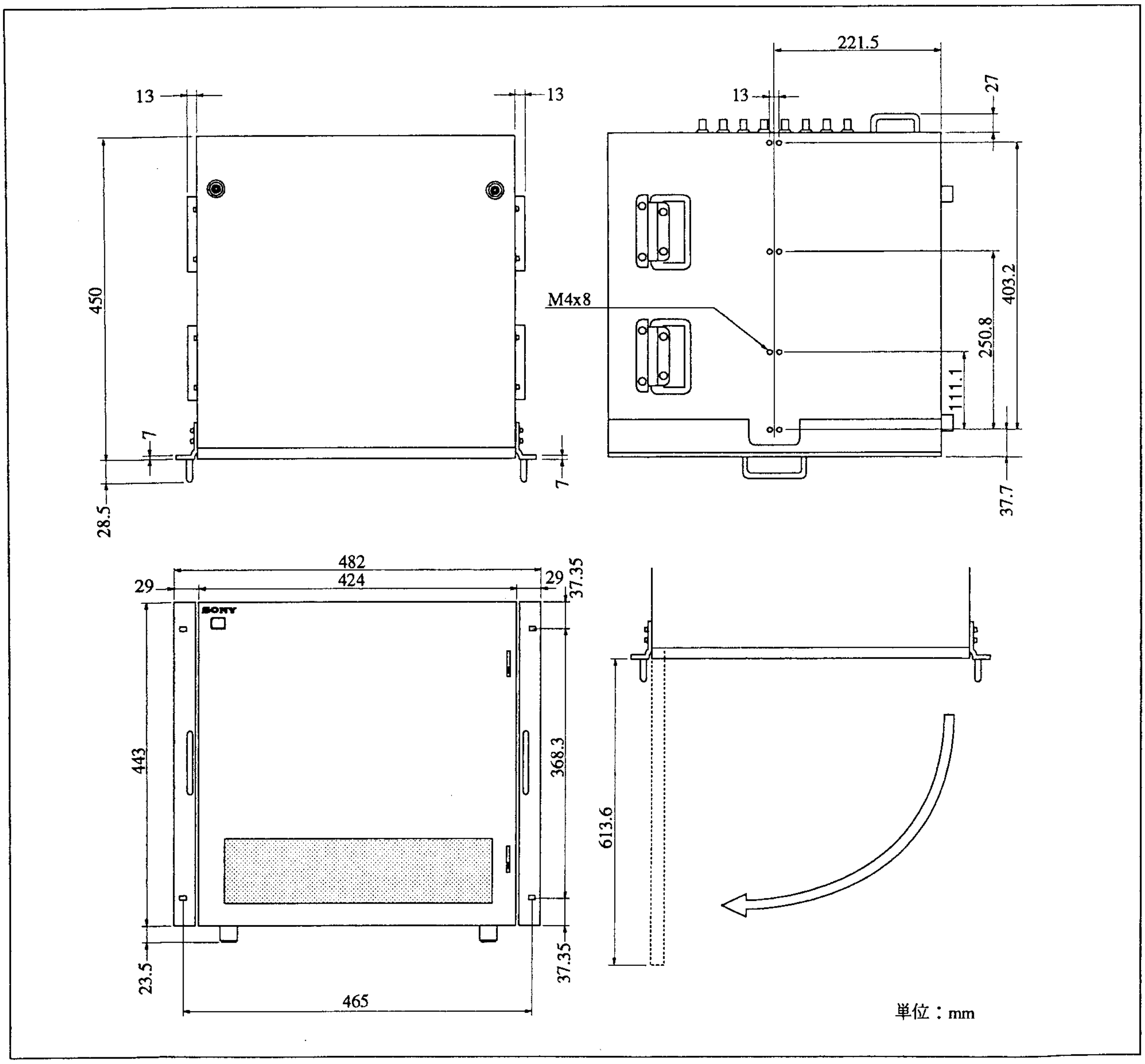
- セット内の温度上昇を防止するために、設置する場所の空気の循環には充分注意して下さい。また、外筐の通風孔を決して覆わないようにして下さい。
- セットの動作環境温度は5℃～40℃ですので、セットを熱源のそばに設置しないで下さい。

2-3. 外形寸法

- セットの外形寸法は図の通りです。
- セット後方はサービス性の点から壁などから最低20 cm離して下さい。

2-4. 電源電圧

- DVS-8000の電源にはスイッチングレギュレーターを使用しており、90 V～132 V用に設計されています。
このため、90 V～132 Vの間は電源電圧を変更することなく使用できます。


13
13
450
7
28.5
7
221.5
13
27
M4x8
403.2
250.8
111.1
37.7
482
424
29
29
37.35
SONY
443
368.3
23.5
37.35
465
613.6
単位：mm

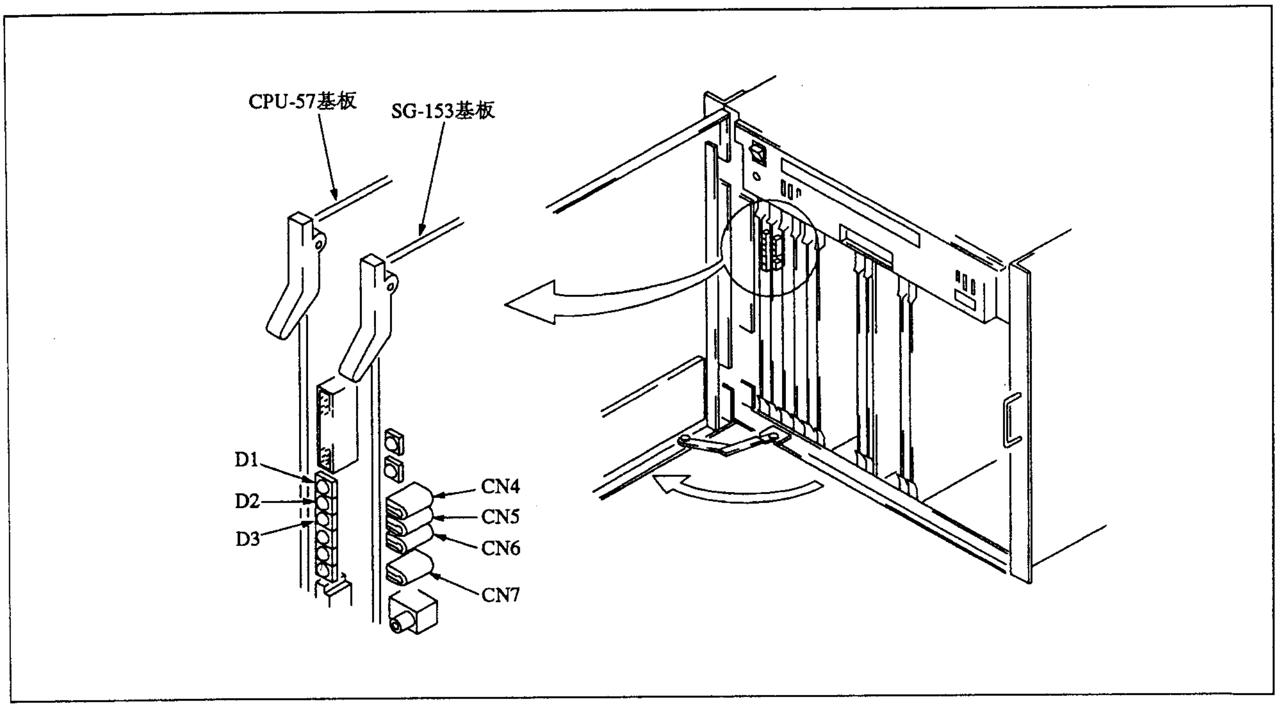
2-5. 設置時の確認と調整

2-5-1. 電源電圧の設定

設置後、セット内部の電源電圧を確認して下さい。

(1) フロントパネルを開き、電源ユニットが正しく挿入されユニット前面部の矢印が指し示している4本のネジ (+PWH 4×8) で固定されているか確認して下さい。

(2) 電源をオンにし、CPU-57基板の電源表示ランプ (D1, D2, D3) が全て点灯しているか確認して下さい。



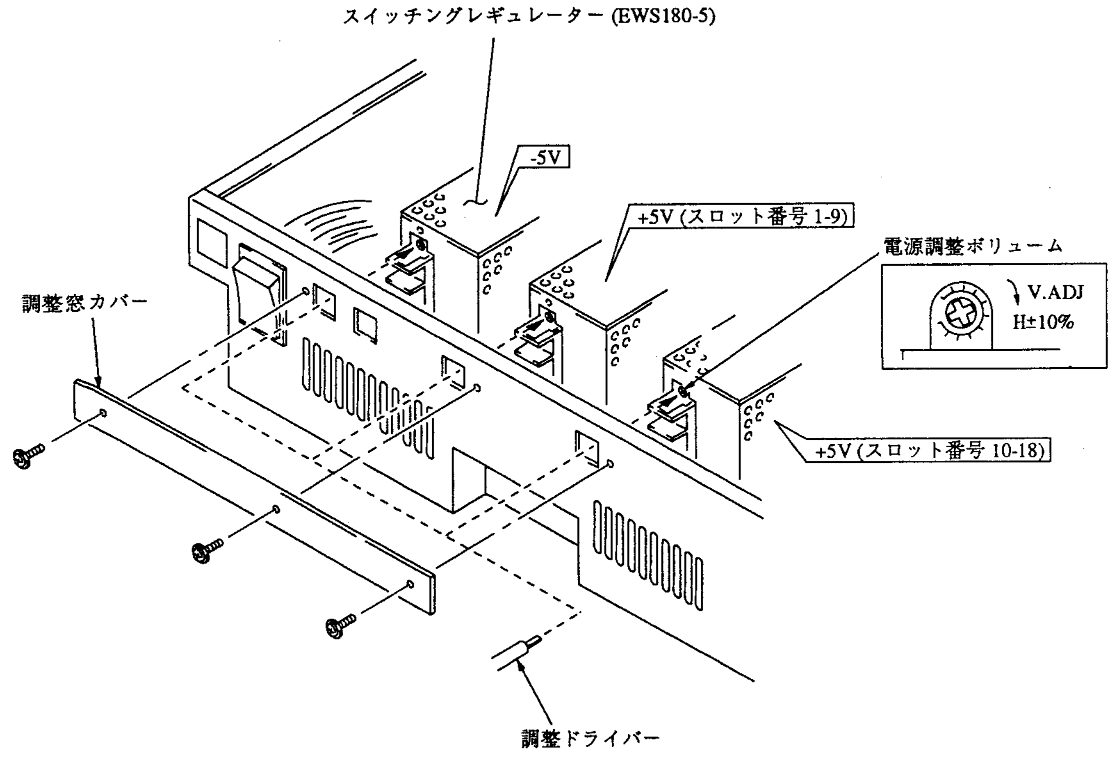
(3) SG-153基板の±5 V テスト端子 (CN4, CN5, CN6) とGND テスト端子 (CN7) にデジタル電圧計を接続し、各テスト端子の電圧値が下表の規格と合致しているか確認して下さい。

測定端子	目　的	規　格
CN4 (+5 V) ←→ CN7 (GND)	スロット番号 1–9のDC電圧 (+5 V) の測定	+5.1 V±0.02 V
CN5 (+5 V) ←→ CN7 (GND)	スロット番号 10–18のDC電圧 (+5 V) の測定	+5.1 V±0.02 V
CN6 (–5 V) ←→ CN7 (GND)	全スロットのDC電圧 (–5 V) の測定	–5.1 V±0.02 V

- 規格に入らない場合は、下記の手順に従って電圧調整を行なって下さい。
(デジタル電圧計はテスト端子に接続したまま調整を行ないます)

STEP 1. 電源ユニットの調整窓カバーを外して下さい。

STEP 2. 調整窓から調整ドライバーを差し込み、該当するスイッチングレギュレーターの電圧調整ボリュームを回します。
デジタル電圧計を見ながら、適正な電圧値が得られるまで調整して下さい。


スイッチングレギュレーター (EWS180-5)
-5V
+5V (スロット番号 1-9)
電源調整ボリューム
V.ADJ
H±10%
調整窓カバー
+5V (スロット番号 10-18)
調整ドライバー

＜注意＞

(1) 電源電圧の設定は、全てのカード基板を挿入した状態で行なって下さい。(オプション基板を含む)

(2) カード基板の入れ替え等を行なった場合、必ず電源電圧を再確認して下さい。

(3) オプションのスペア電源ユニットBKDS-8090をお買い求めになった場合は、あらかじめ電源電圧の設定を行なっておくと便利です。

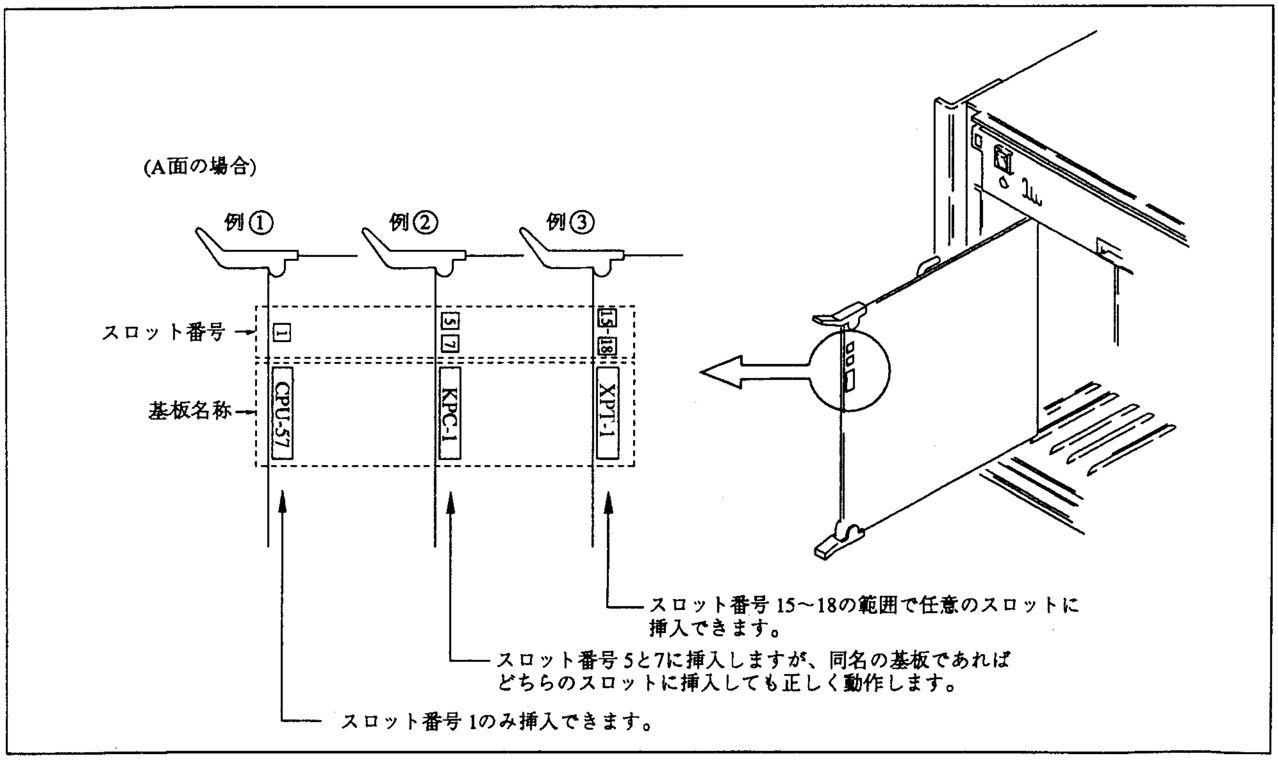
(4) 電源電圧の調整ボリュームとテスト端子の組み合せが適正であるよう十分ご注意下さい。

2-5-2. カード基板の設置方法

- DVS-8000は、基板ごとに設置すべきスロットが定められています。下記に従って、各基板が所定のスロットに正しく設置されているか確認して下さい。

スロット番号	基板名	スロット番号	基板名
1	CPU-57	9	MIX-6
2	SG-153	10	OUT-1
3	WKG-5	11 & 12	BKDS-8030 (オプション基板/2枚組)
4	WKG-4	13	MAT-1
5 & 7	KPC-1 (2枚組)	14	BKDS-8040 (オプション基板)
6 & 8	MIX-4 (2枚組)	15～18	XPT-1 または BKDS-8020, BKDS-8021 (オプション基板)

- 基板の扉側上端部には、A面，B面の両方に基板名称とその基板を設置できるスロット番号が表示されています。



スロット番号 15～18の範囲で任意のスロットに挿入できます。

スロット番号 5と7に挿入しますが、同名の基板であればどちらのスロットに挿入しても正しく動作します。

スロット番号 1のみ挿入できます。

- DVS-8000は、BK基板（オプション）の選択により、様々なシステムへの対応や機能の拡張が可能です。各BK基板も本体基板と同様、扉側上端部にあるスロット番号の表示に従って、定められた範囲および順序で設置して下さい。

＜注意＞

(1) 各基板のコネクターがゆるみなく本体のMB-245基板に接続しているか確認して下さい。
(2) 設置の順序をまちがえるとシステムエラーとなり、正しく作動しません。
(3) BK基板を追加した場合は、必ず電源電圧を再確認して下さい。

2-6. 接続コネクター

設置時、サービス時等において、コネクターパネル部の各種コネクターにケーブルを接続する際には、下記のコネクターまたはその同等品を接続して下さい。

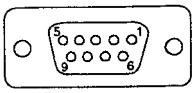
コネクターパネル部の コネクターの機能名称	接続するケーブル側の コネクターの部品番号及び名称
CONTROL PANEL (CONTROL FDD) EDITOR A EDITOR B DME AUX BUS SPARE MATRIX USER	D-SUB 9 PIN (Male) PLUG 1-560-651-00 SHELL 1-561-749-00
TERMINAL GPI	D-SUB 25 PIN (Male) PLUG 1-566-356-00 (*1) SHELL 1-563-377-00
TALLY	D-SUB 50 PIN (Male) PLUG 1-566-358-00 (*1) SHELL 1-563-379-00
REF INPUT SPARE REF OUTPUT MONITOR OUTPUT ME-1 OUTPUTS ME-2 OUTPUTS PGM OUTPUTS CLEAN OUTPUT PVW OUTPUT AUX BUS OUTPUTS EDIT PVW OUTPUTS CHROMA KEY INPUTS PRIMARY INPUTS	BNC同軸コネクタープラグ
AC IN	MAIN POWER SUPPLY CABLE (DVS-8000に付属) 1-551-812-11

(*1)・・・PLUGには、次のような圧着用コネクターが必要です。
AWG #18～#22 : 1-566-493-00
AWG #22～#24 : 1-564-774-00
AWG #24～#30 : 1-564-775-00

2-7. コネクターの入出力信号

コネクターパネル部のコネクターの入出力信号は次の通りです。

- CONTROL PANEL [CONTROL] : RS-422A (D-SUB 9 PIN)

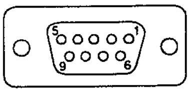


-EXT VIEW-

PIN No.	信号名	機能
1	GND	フレームグランド
2	CON TX-A	DVS-8000からCONTROL PANEL (*1) への送信データ (–)
3	CON RX-B	CONTROL PANELからDVS-8000への受信データ (+)
4	GND	CONTROL PANELからDVS-8000への共通グランド
5	————	スペア
6	GND	DVS-8000からCONTROL PANELへの共通グランド
7	CON TX-B	DVS-8000からCONTROL PANELへの送信データ (+)
8	CON RX-A	CONTROL PANELからDVS-8000への受信データ (–)
9	GND	フレームグランド

(*1)・・・CONTROL PANEL BKDS-8010など

- CONTROL PANEL [FDD] : RS-422A (D-SUB 9 PIN)

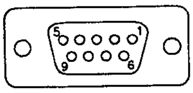


-EXT VIEW-

PIN No.	信号名	機能
1	GND	フレームグランド
2	FDD TX-A	DVS-8000からFDD (*2) への送信データ (–)
3	FDD RX-B	FDDからDVS-8000への受信データ (+)
4	GND	FDDからDVS-8000への共通グランド
5	————	スペア
6	GND	DVS-8000からFDDへの共通グランド
7	FDD TX-B	DVS-8000からFDDへの送信データ (+)
8	FDD RX-A	FDDからDVS-8000への受信データ (–)
9	GND	フレームグランド

(*2)・・・BKDS-8010に付属のFDDなど

- EDITOR A : RS-422A (D-SUB 9 PIN)

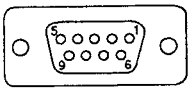


-EXT VIEW-

PIN No.	信号名	機能
1	GND	フレームグランド
2	EDT A TX-A	DVS-8000からEDITOR (*3) への送信データ (–)
3	EDT A RX-B	EDITORからDVS-8000への受信データ (+)
4	GND	EDITORからDVS-8000への共通グランド
5	————	スペア
6	GND	DVS-8000からEDITORへの共通グランド
7	EDT A TX-B	DVS-8000からEDITORへの送信データ (+)
8	EDT A RX-A	EDITORからDVS-8000への受信データ (–)
9	GND	フレームグランド

(*3) ・・・EDITING CONTROL UNIT BVE-9000など

- EDITOR B : RS-422A (D-SUB 9 PIN)

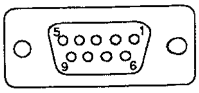


-EXT VIEW-

PIN No.	信号名	機能
1	GND	フレームグランド
2	EDT B TX-A	DVS-8000からEDITOR (*4) への送信データ (–)
3	EDT B RX-B	EDITORからDVS-8000への受信データ (+)
4	GND	EDITORからDVS-8000への共通グランド
5	————	スペア
6	GND	DVS-8000からEDITORへの共通グランド
7	EDT B TX-B	DVS-8000からEDITORへの送信データ (+)
8	EDT B RX-A	EDITORからDVS-8000への受信データ (–)
9	GND	フレームグランド

(*4) ・・・BVE-9000など

- DME : RS-422A (D-SUB 9 PIN)

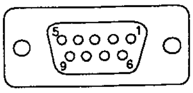


-EXT VIEW-

PIN No.	信号名	機能
1	GND	フレームグランド
2	DME TX-A	DVS-8000からDME (*5) への送信データ (–)
3	DME RX-B	DMEからDVS-8000への受信データ (+)
4	GND	DMEからDVS-8000への共通グランド
5	————	スペア
6	GND	DVS-8000からDMEへの共通グランド
7	DME TX-B	DVS-8000からDMEへの送信データ (+)
8	DME RX-A	DMEからDVS-8000への受信データ (–)
9	GND	フレームグランド

(*5)・・・DIGITAL MULTI EFFECTS DME-5000など

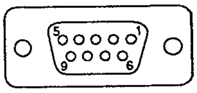
- AUX BUS (REMOTE) : RS-422A (D-SUB 9 PIN)



-EXT VIEW-

PIN No.	信号名	機能
1	GND	フレームグランド
2	AUX TX-A	DVS-8000からAUX BUS REMOTEへの送信データ (–)
3	AUX RX-B	AUX BUS REMOTEからDVS-8000への受信データ (+)
4	GND	AUX BUS REMOTEからDVS-8000への共通グランド
5	————	スペア
6	GND	DVS-8000からAUX BUS REMOTEへの共通グランド
7	AUX TX-B	DVS-8000からAUX BUS REMOTEへの送信データ (+)
8	AUX RX-A	AUX BUS REMOTEからDVS-8000への受信データ (–)
9	GND	フレームグランド

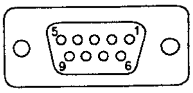
- SPARE : RS-422A (D-SUB 9 PIN)



-EXT VIEW-

PIN No.	信号名	機能
1	GND	フレームグランド
2	SPARE D1 (–)	DVS-8000からの送(受)信データ (–)
3	SPARE D2 (+)	DVS-8000への受(送)信データ (+)
4	GND	DVS-8000への共通グランド
5	―――	スペア
6	GND	DVS-8000からの共通グランド
7	SPARE D1 (+)	DVS-8000からの送(受)信データ (+)
8	SPARE D2 (–)	DVS-8000への受(送)信データ (–)
9	GND	フレームグランド

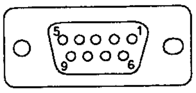
- MATRIX (SWITCHER) : RS-422A (D-SUB 9 PIN)



-EXT VIEW-

PIN No.	信号名	機能
1	GND	フレームグランド
2	MTX RX-A	MATRIX SWITCHERからDVS-8000への受信データ (–)
3	MTX TX-B	DVS-8000からMATRIX SWITCHERへの送信データ (+)
4	GND	DVS-8000からMATRIX SWITCHERへの共通グランド
5	―――	スペア
6	GND	MATRIX SWITCHERからDVS-8000への共通グランド
7	MTX RX-B	MATRIX SWITCHERからDVS-8000への受信データ (+)
8	MTX TX-A	DVS-8000からMATRIX SWITCHERへの送信データ (–)
9	GND	フレームグランド

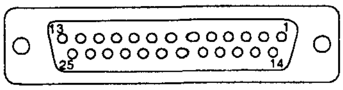
- USER : RS-422A (D-SUB 9 PIN)



-EXT VIEW-

PIN No.	信号名	機能
1	GND	フレームグランド
2	USER D1 (–)	DVS-8000からの送(受)信データ(–)
3	USER D2 (+)	DVS-8000への受(送)信データ(+)
4	GND	DVS-8000への共通グランド
5	————	スペア
6	GND	DVS-8000からの共通グランド
7	USER D1 (+)	DVS-8000からの送(受)信データ(+)
8	USER D2 (–)	DVS-8000への受(送)信データ(–)
9	GND	フレームグランド

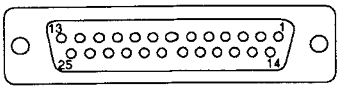
- TERMINAL : RS-232C (D-SUB 25 PIN)



—EXT VIEW—

PIN No.	信号名	機能
1	GND	フレームグランド
2	RXD	受信データ
3	TXD	送信データ
4	CTS	送信許可
5	RTS	送信要求
6	—	NC
7	GND	グランド
8	—	NC
9	—	
10	—	
11	—	
12	—	
13	—	
14	—	
15	—	
16	—	
17	—	
18	—	
19	—	
20	—	
21	—	
22	—	
23	—	
24	—	
25	—	

- GPI : (D-SUB 25 PIN) INPUT×8, TTL
OUTPUT×7, リレー接点 30 V 100 mA (抵抗負荷の場合)

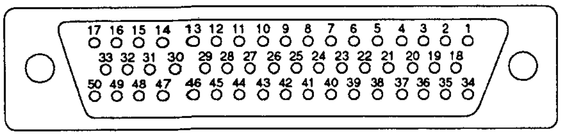


－EXT VIEW－

PIN No.	信号名	機能
1	GND	グランド
2	GND	グランド
3	GPI IN 2	汎用入力
4	GPI IN 4	
5	GPI IN 6	
6	GPI IN 8	
7	GPI OUT 1B	汎用出力
8	GPI OUT 2B	
9	GPI OUT 3B	
10	GPI OUT 4B	
11	GPI OUT 5B	
12	GPI OUT 6B	
13	GPI OUT 7B	
14	GND	グランド
15	GPI IN 1	汎用入力
16	GPI IN 3	
17	GPI IN 5	
18	GPI IN 7	
19	GPI OUT 1A	汎用出力
20	GPI OUT 2A	
21	GPI OUT 3A	
22	GPI OUT 4A	
23	GPI OUT 5A	
24	GPI OUT 6A	
25	GPI OUT 7A	

※ 同一番号のAとBが1組のリレー接点となっています。

- TALLY : (D-SUB 50 PIN) OUTPUT×7, リレー接点 30 V 100 mA (抵抗負荷の場合)


17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18
50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34

PIN No.	信号名	機能
1	TALLY COM	コモン出力
2	TALLY COM	
3	TALLY COM	
4	TALLY 3	プライマリータリー出力
5	TALLY 6	
6	TALLY 9	
7	TALLY 12	
8	TALLY 15	
9	TALLY 18	
10	TALLY 21	
11	TALLY 24	
12	TALLY 27	
13	TALLY 30	
14	―――	NC
15	―――	NC
16	―――	NC
17	―――	NC
18	TALLY COM	コモン出力
19	TALLY COM	
20	TALLY 2	プライマリータリー出力
21	TALLY 5	
22	TALLY 8	
23	TALLY 11	
24	TALLY 14	
25	TALLY 17	

PIN No.	信号名	機能
26	TALLY 20	プライマリータリー出力
27	TALLY 23	
28	TALLY 26	
29	TALLY 29	
30	TALLY 32	
31	TALLY ME 2	ME-2 タリー出力
32	TALLY CK 2	クロマキー2 タリー出力
33	———	NC
34	TALLY COM	コモン出力
35	TALLY COM	
36	TALLY 1	プライマリータリー出力
37	TALLY 4	
38	TALLY 7	
39	TALLY 10	
40	TALLY 13	
41	TALLY 16	
42	TALLY 19	
43	TALLY 22	
44	TALLY 25	
45	TALLY 28	
46	TALLY 31	
47	TALLY ME 1	ME-1 タリー出力
48	TALLY CK 1	クロマキー1 タリー出力
49	———	NC
50	———	

※ 各タリー出力とコモン出力の間がリレー接点となっています。

• REF INPUT :	BNCコネクター, ループスルー付 ANALOG BLACK BURST 0±3 dB
• REF OUTPUT :	BNCコネクター, 75Ω ANALOG BLACK BURST 0±3 dB
• MONITOR OUTPUT:	BNCコネクター, 75Ω ANALOG 1.0 Vp-p±3 dB
• ME-1 OUTPUTS : [PGM], [PVW]	BNCコネクター, 75Ω SERIAL DIGITAL 800 mV±10%
• ME-2 OUTPUTS : [PGM], [PVW]	BNCコネクター, 75Ω SERIAL DIGITAL 800 mV±10%
• PGM OUTPUTS : [1]～[4]	BNCコネクター, 75Ω SERIAL DIGITAL 800 mV±10%
• CLEAN OUTPUT :	BNCコネクター, 75Ω SERIAL DIGITAL 800 mV±10%
• PVW OUTPUT :	BNCコネクター, 75Ω SERIAL DIGITAL 800 mV±10%
• AUX BUS OUTPUTS : [1]～[4]	BNCコネクター, 75Ω SERIAL DIGITAL 800 mV±10%
• EDIT PVW OUTPUTS : [1], [2]	BNCコネクター, 75Ω SERIAL DIGITAL 800 mV±10%
• CHROMA KEY INPUTS : [Y/G], [B-Y/B] [R-Y/R], [SYNC]	BNCコネクター, 75Ω ANALOG COMPONENT
• PRIMARY INPUTS : [1]～[32]	BNCコネクター, 75Ω SERIAL DIGITAL 800 mV±10% または ANALOG COMPOSITE 0±3 dB

2-8. ラックマウントの方法

• DVS-8000は19インチ標準ラックに組み込んで使用することができます。この時レールはオプションのラックマウントレールRMM-18DVを必ず使用してください。

＜用意するもの＞

• ラックマウントレール RMM-18DV	
• 板ナット (長) 取り付け用ネジ (+B 4×8)	8本
• ラックマウント用ネジ (+RK 5×16)	4本
• ラックマウント用飾りワッシャー (ソニー部品番号 2-297-913-01)	4個

＜取り付け時の注意＞

(1) 19インチ標準ラックにDVS-8000及び関連機種をラックマウントした時は、ラック内の温度上昇を防止するため、換気用ファンを取り付けることをお薦めします。ラック内の全てのセットが5℃～40℃の範囲で使用できるように注意してください。

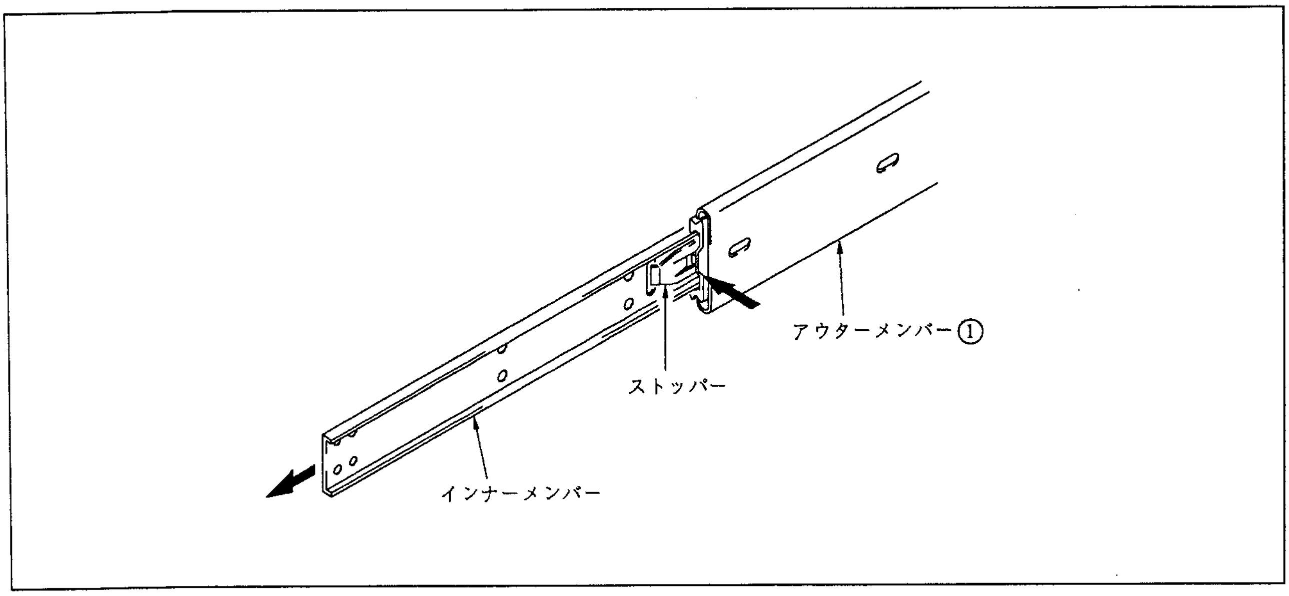
(2) ラックマウントする時は必ず推奨のレールをご使用下さい。ラックアングルだけではセットをラックに完全に固定できないため危険です。

(3) ラックはしっかりした床にボルトで固定することをお薦めします。セットをラックから引き出す際に倒れかかってくるのを防止できます。

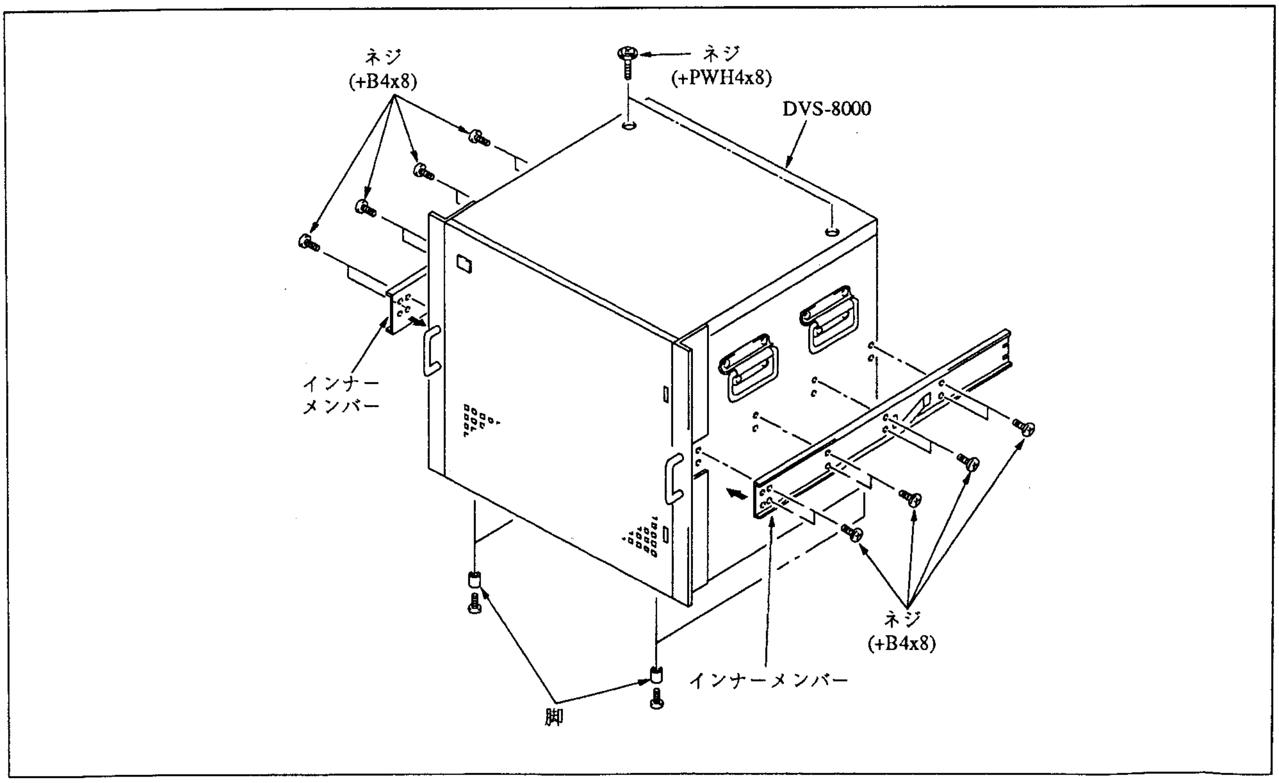
(4) ラックマウントレールRMM-18DVには付属の設置マニュアルが同梱されていますが、DVRシリーズのVTRをラックマウントするためのマニュアル内容になっています。DVS-8000のラックマウントは一部VTRと異なるため、本マニュアルの手順に従って下さい。

＜取り付け方法＞

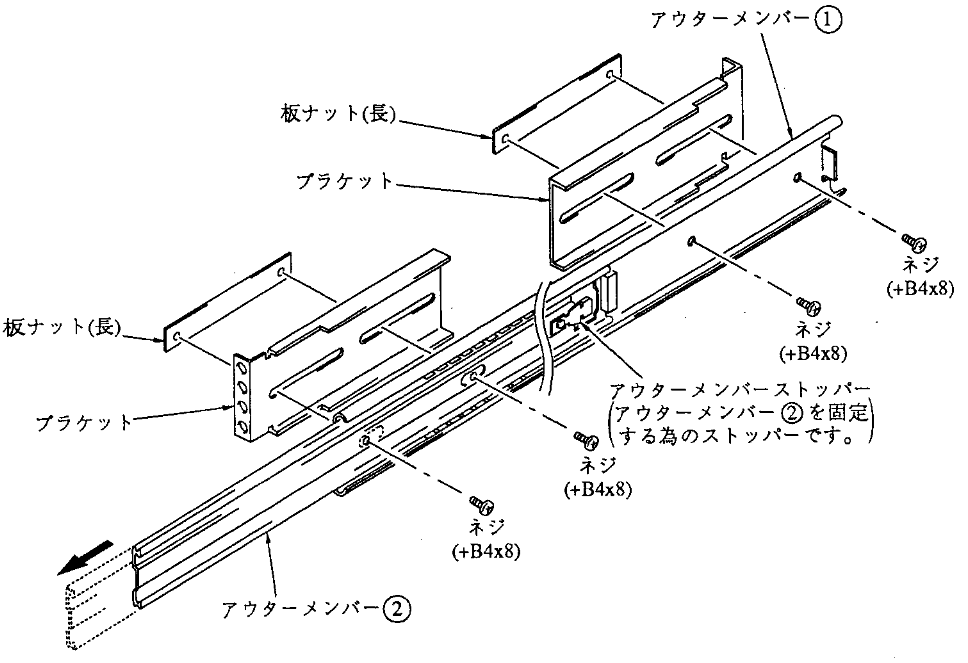
(1) ラックマウントレールRMM-18DVのストッパーを押しながら、インナーメンバーを引き出します。


アウターメンバー①
ストッパー
インナーメンバー

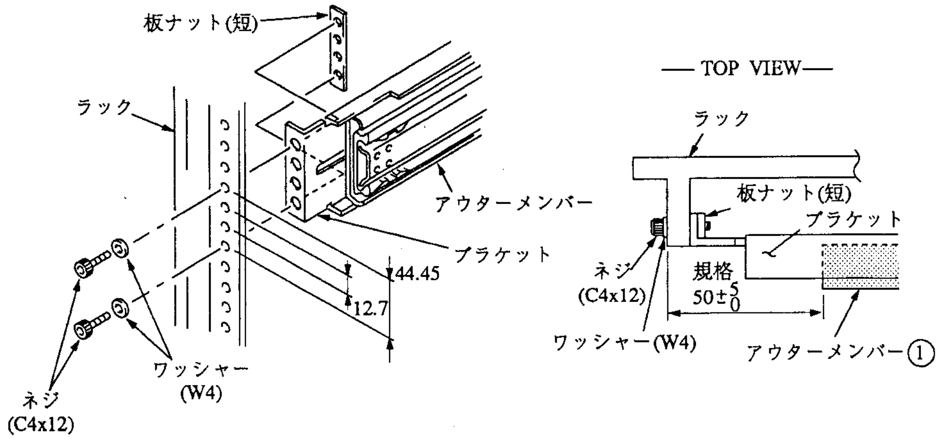
(2) RMM-18DVに付属のネジ (+B 4×8) 16本を使って、インナーメンバーをセットに取り付けます。
この時、セット上板のネジ (+PWH 4×8) 2本を必ず外して下さい。
また、セットに付いている脚は場合に応じて外して下さい。


ネジ
(+B4x8)
ネジ
(+PWH4x8)
DVS-8000
インナー
メンバー
ネジ
(+B4x8)
インナーメンバー
脚

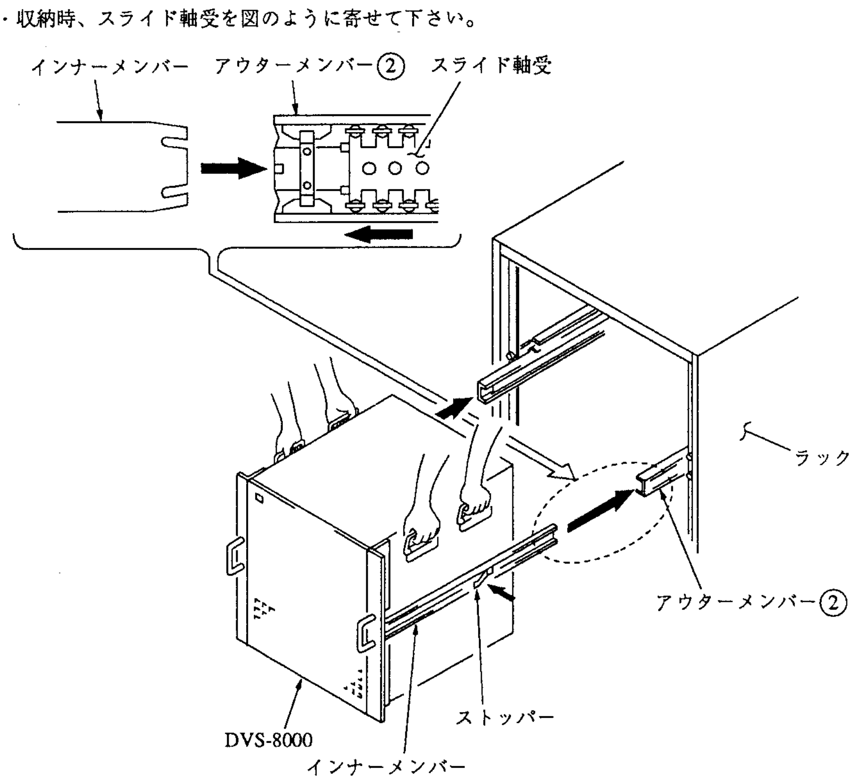
(3) 用意したネジ (+B 4×8) 8本を使ってアウターメンバー①にブラケットを仮り止めします。
取り付けはアウターメンバー②を前後に動かしてアウターメンバー①のネジ穴が見えるようにして行ないます。


アウターメンバー①
板ナット(長)
ブラケット
ネジ
(+B4x8)
ネジ
(+B4x8)
板ナット(長)
ブラケット
アウターメンバーストッパー
(アウターメンバー②を固定する為のストッパーです。)
ネジ
(+B4x8)
ネジ
(+B4x8)
アウターメンバー②

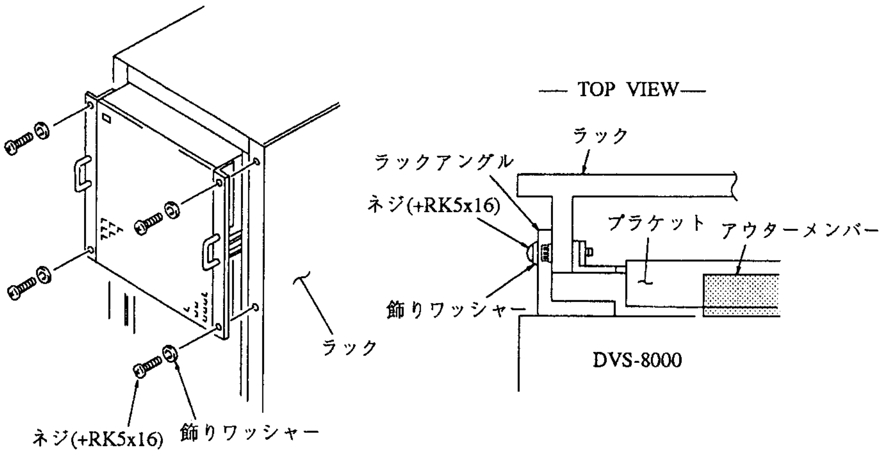
(4) RMM-18DVに付属のネジ (C 4×12) 4本及びワッシャー (W4) 4ケを使って、アウターメンバー組立をラックに仮止めします。この際、アウターメンバーの取り付け位置を調整します。
調整後、(3) で仮止めしたネジ (+B 4×8) を締め付けます。


板ナット(短)
ラック
アウターメンバー
ブラケット
44.45
12.7
ネジ
(C4x12)
ワッシャー
(W4)
— TOP VIEW —
ラック
板ナット(短)
ブラケット
ネジ
(C4x12)
規格
50±5/0
ワッシャー(W4)
アウターメンバー①

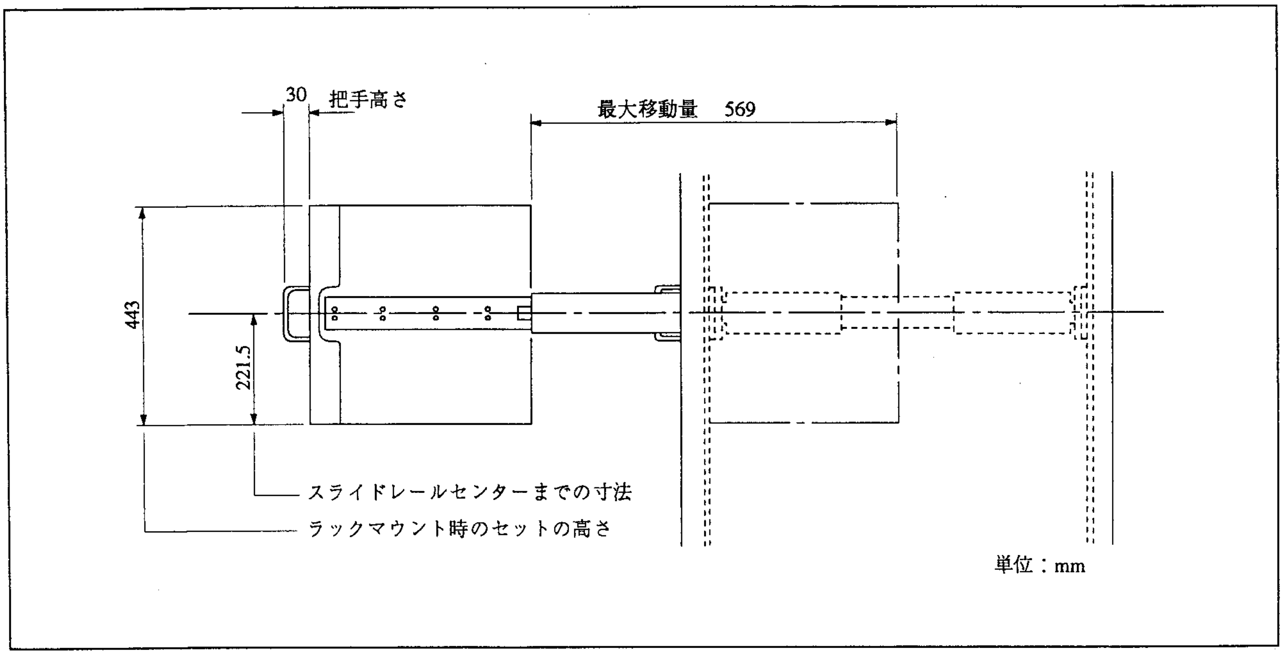
(5) 収納するときはインナーメンバーのストッパーを解除してください。スムーズに収納できることを確認した後、(4) で仮止めしたネジ (C 4×12) を締め付けます。


・収納時、スライド軸受を図のように寄せて下さい。
インナーメンバー
アウターメンバー②
スライド軸受
ラック
アウターメンバー②
ストッパー
DVS-8000
インナーメンバー

(6) ラックに収納した後、用意したネジ (+RK 5×16) 4本と飾りワッシャー4個を使ってセットをラックに固定して下さい。


— TOP VIEW—
ラック
ラックアングル
ネジ(+RK5x16)
ブラケット
アウターメンバー
飾りワッシャー
DVS-8000
ラック
ネジ(+RK5x16)
飾りワッシャー

- DVS-8000をラックマウントしたときの最大移動距離は下図の通りです。


30
把手高さ
最大移動量　569
443
221.5
スライドレールセンターまでの寸法
ラックマウント時のセットの高さ
単位：mm

2-9. 付属アクセサリー

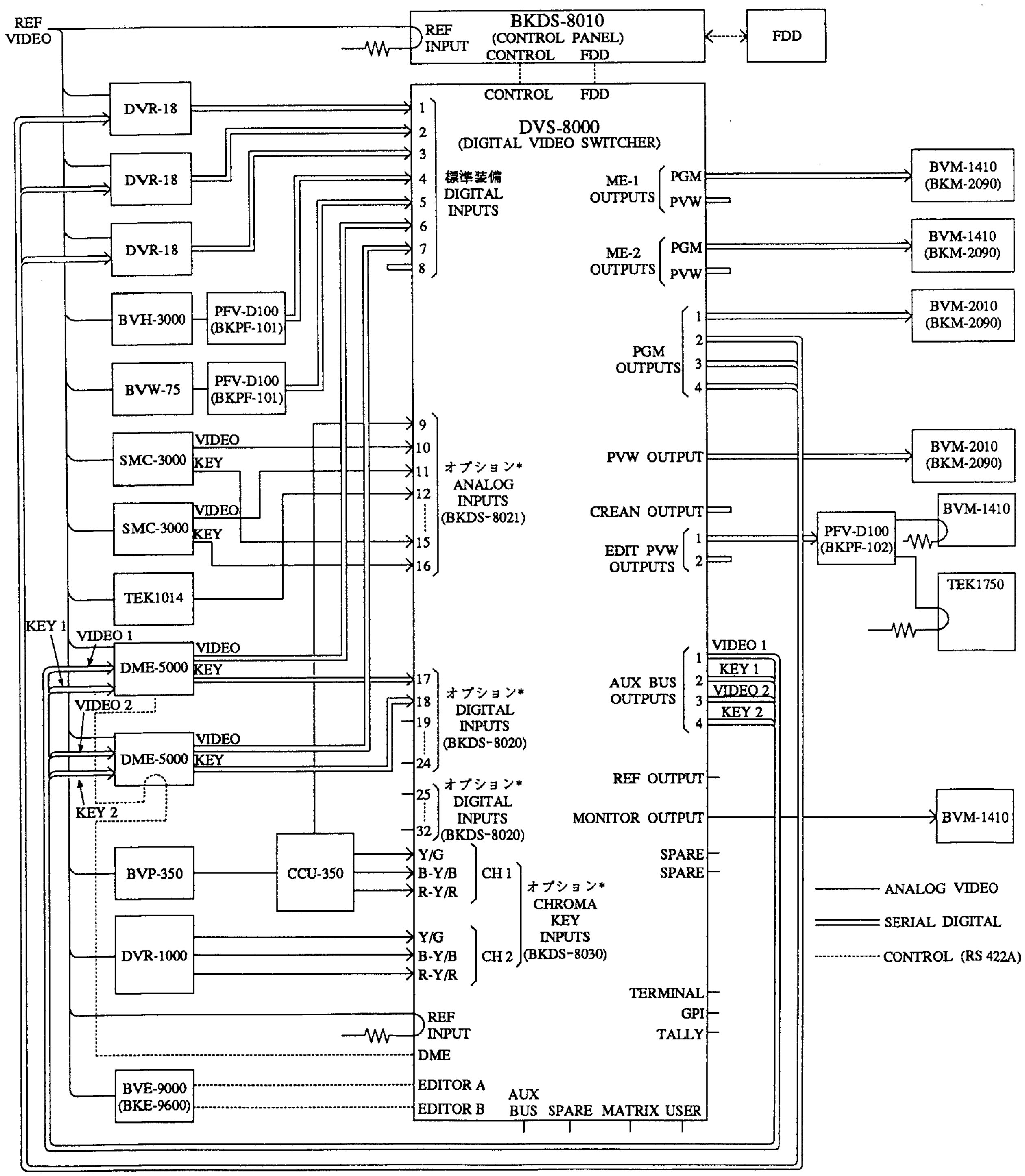
品名	部品 No.	個数
延長基板 (EX-209)	A-6279-727-A	1
電源コード	1-551-812-11	1
電源コード用プラグアダプター	1-506-411-21 2-990-242-01	1組
75 Ω終端器	1-569-221-11	1
オペレーションアンドメンテナンスマニュアル	3-166-848-01	1

2-10. 別売アクセサリー

DVS-8000の別売アクセサリーとしては下記のものが用意されています。

- BKDS-8010 : CONTROL PANEL
- BKDS-8020 : DIGITAL INPUT BOARD
- BKDS-8021 : ANALOG INPUT BOARD
- BKDS-8030 : CLEAN CHROMA KEY BOARD (2枚組)
- BKDS-8040 : FRAME MEMORY BOARD
- BKDS-8090 : SPARE POWER SUPPLY UNIT

2-11. システム接続例


REF VIDEO
BKDS-8010
(CONTROL PANEL)
REF INPUT
CONTROL
FDD
FDD
CONTROL
FDD
DVS-8000
(DIGITAL VIDEO SWITCHER)
DVR-18
DVR-18
DVR-18
BVH-3000
PFV-D100 (BKPF-101)
BVW-75
PFV-D100 (BKPF-101)
SMC-3000
VIDEO
KEY
SMC-3000
VIDEO
KEY
TEK1014
KEY 1
VIDEO 1
DME-5000
VIDEO
KEY
VIDEO 2
DME-5000
VIDEO
KEY
KEY 2
BVP-350
CCU-350
DVR-1000
BVE-9000 (BKE-9600)
1 2 3 4 5 6 7 8
標準装備 DIGITAL INPUTS
9 10 11 12 15 16
オプション* ANALOG INPUTS (BKDS-8021)
17 18 19 24
オプション* DIGITAL INPUTS (BKDS-8020)
25 32
オプション* DIGITAL INPUTS (BKDS-8020)
Y/G
B-Y/B
R-Y/R
CH 1
Y/G
B-Y/B
R-Y/R
CH 2
オプション* CHROMA KEY INPUTS (BKDS-8030)
REF INPUT
DME
EDITOR A
EDITOR B
AUX BUS
SPARE
MATRIX
USER
ME-1 OUTPUTS
PGM
PVW
ME-2 OUTPUTS
PGM
PVW
PGM OUTPUTS
1 2 3 4
PVW OUTPUT
CREAN OUTPUT
EDIT PVW OUTPUTS
1 2
AUX BUS OUTPUTS
1 2 3 4
VIDEO 1
KEY 1
VIDEO 2
KEY 2
REF OUTPUT
MONITOR OUTPUT
SPARE
SPARE
TERMINAL
GPI
TALLY
BVM-1410 (BKM-2090)
BVM-1410 (BKM-2090)
BVM-2010 (BKM-2090)
BVM-2010 (BKM-2090)
PFV-D100 (BKPF-102)
BVM-1410
TEK1750
BVM-1410
ANALOG VIDEO
SERIAL DIGITAL
CONTROL (RS 422A)

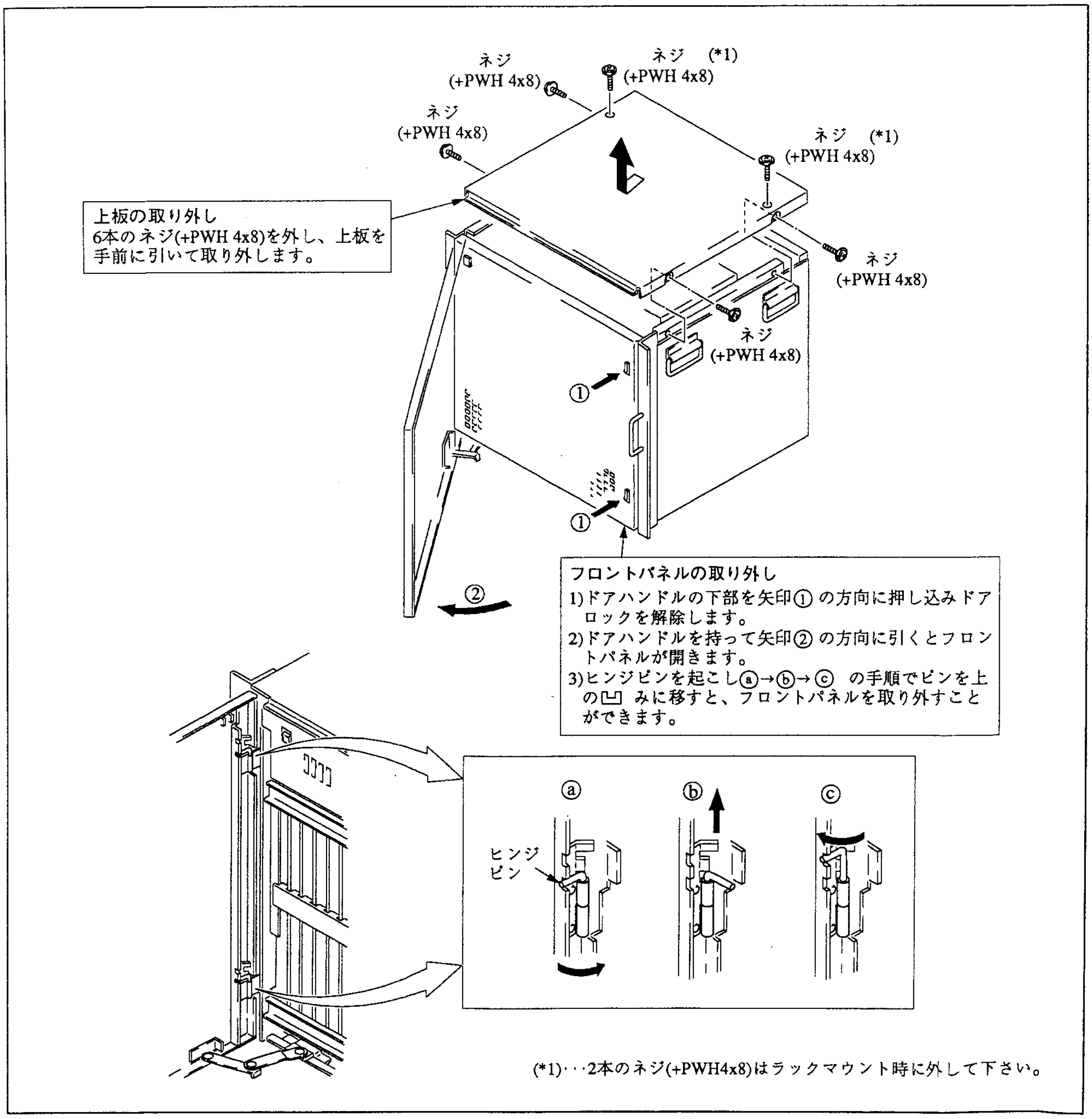
第3章
サービスインフォメーション

3-1. ラックからの取り外し

- コネクターパネルに接続されている全てのケーブルを外し、ラックマウント用固定ネジを外して、アングルの把手を手前に引き出します。

＜注意＞
ラックから引き出す時には落下防止のため必ず2人以上で作業して下さい。

3-2. 外装の開閉/取り外し

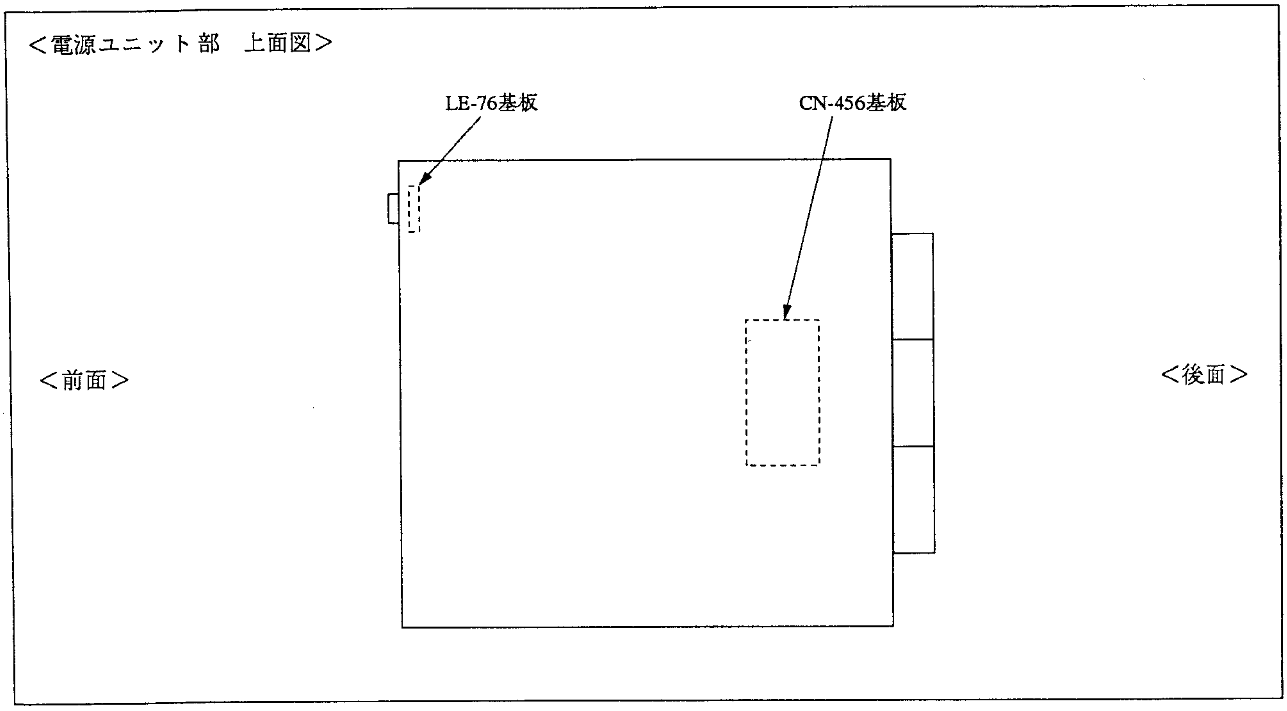

ネジ
(+PWH 4x8)
ネジ　(*1)
(+PWH 4x8)
ネジ
(+PWH 4x8)
ネジ　(*1)
(+PWH 4x8)
ネジ
(+PWH 4x8)
ネジ
(+PWH 4x8)
①
①
②
ⓐ
ⓑ
ⓒ
ヒンジ
ピン

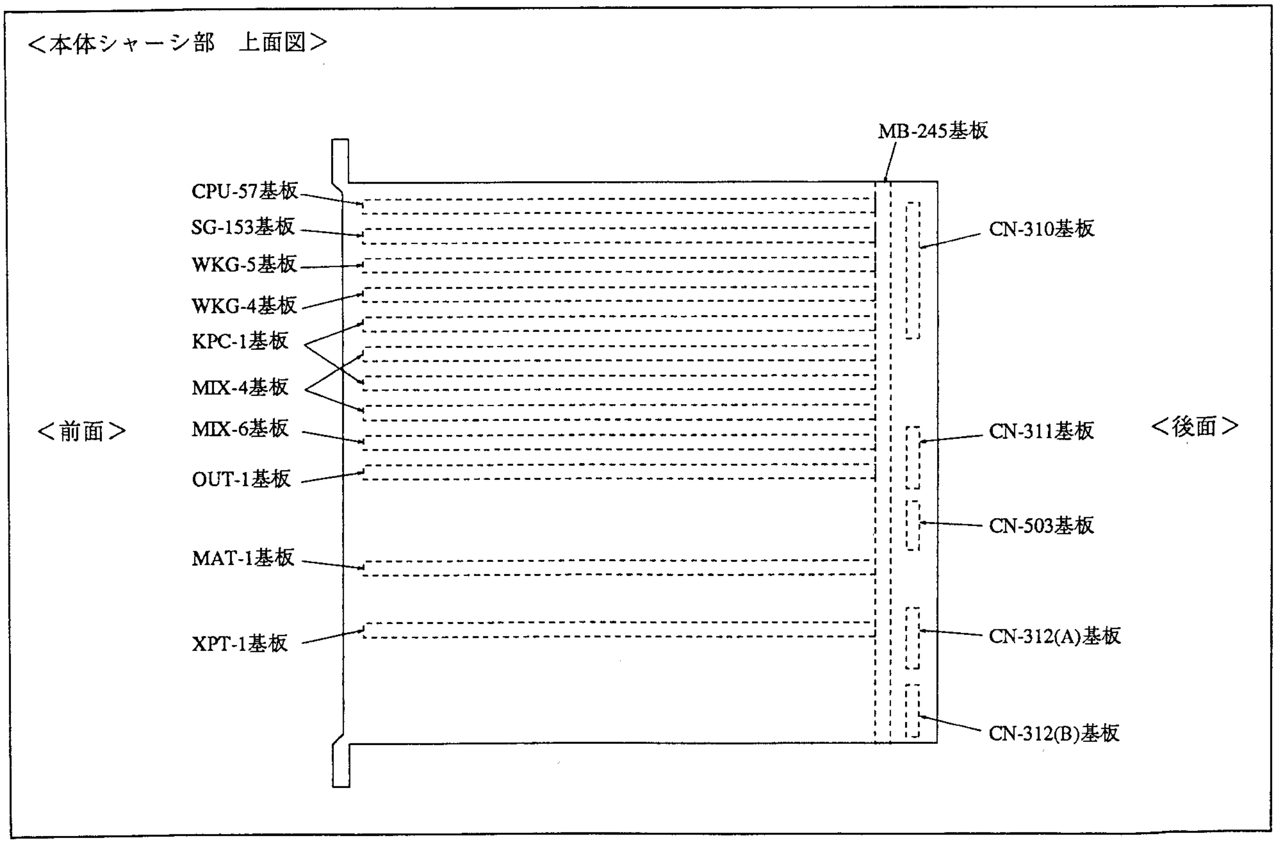
上板の取り外し
6本のネジ(+PWH 4x8)を外し、上板を手前に引いて取り外します。

フロントパネルの取り外し
1) ドアハンドルの下部を矢印① の方向に押し込みドアロックを解除します。
2) ドアハンドルを持って矢印② の方向に引くとフロントパネルが開きます。
3) ヒンジピンを起こしⓐ→ⓑ→ⓒ の手順でピンを上の凵 みに移すと、フロントパネルを取り外すことができます。

(*1)･･･2本のネジ(+PWH4x8)はラックマウント時に外して下さい。

3-3. プリント基板の配置図


<電源ユニット部　上面図>
LE-76基板
CN-456基板
<前面>
<後面>


<本体シャーシ部　上面図>
MB-245基板
CPU-57基板
SG-153基板
WKG-5基板
WKG-4基板
KPC-1基板
MIX-4基板
MIX-6基板
OUT-1基板
MAT-1基板
XPT-1基板
<前面>
CN-310基板
CN-311基板
CN-503基板
CN-312(A)基板
CN-312(B)基板
<後面>

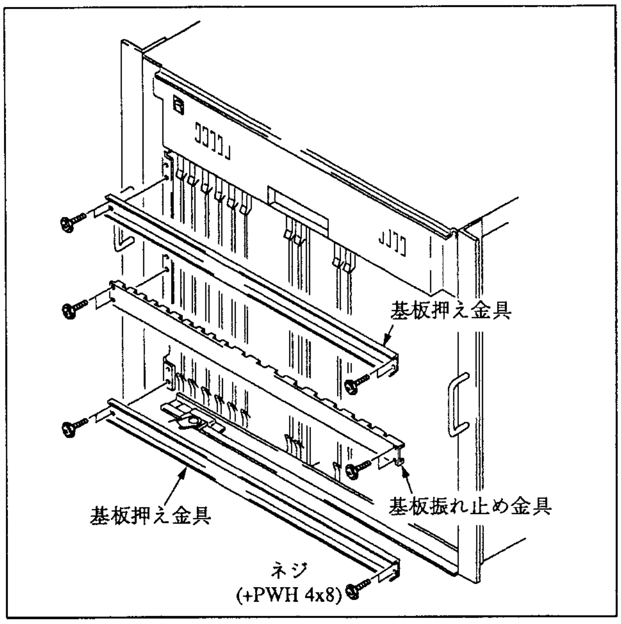
3-4. 回路構成

基板名	機　能
CPU-57	CPU BOARD
SG-153	SYNC GENERATOR BOARD
WKG-5	ENHANCED WIPE BOARD
WKG-4	BASIC WIPE BOARD
KPC-1	KEY PROCESSOR BOARD
MIX-4	MIXER BOARD
MIX-6	DSK (DOWNSTREAM KEYER) BOARD
OUT-1	OUTPUT PROCESSOR BOARD
MAT-1	MATTE GENERATOR BOARD
XPT-1	DIGITAL INPUT BOARD
MB-245	MOTHER BOARD
EX-209	EXTENSION BOARD
CN-310	CONTROL CONNECTOR BOARD
CN-311	OUTPUT CONNECTOR BOARD
CN-312(A)	PRIMARY INPUT CONNECTOR BOARD (A)
CN-312(B)	PRIMARY INPUT CONNECTOR BOARD (B)
CN-456	POWER SUPPLY CONNECTOR BOARD
CN-503	CHROMA KEY INPUT CONNECTOR BOARD
LE-76	POWER LED BOARD

3-5. 基板の取り付け・取り外し方法

(1) 3-2. と同じ手順でフロントパネルを外します。

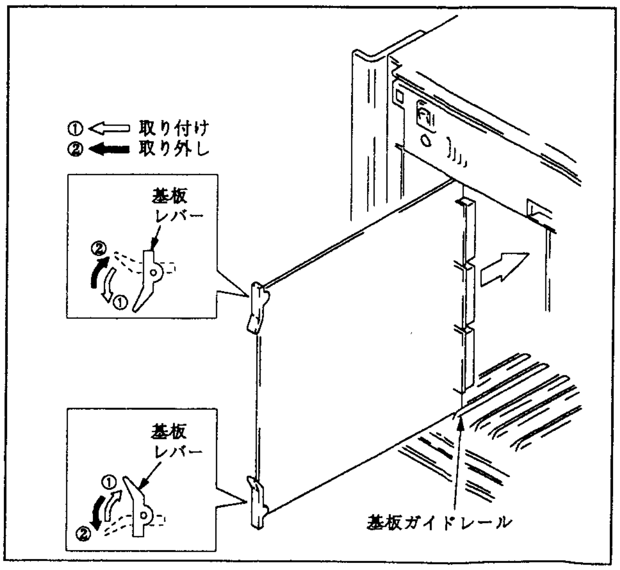
(2) 基板押え金具 (×2) と基板振れ止め金具 (×1) を固定しているネジ12本 (+PWH 4×8) を外します。



(3) 基板を基板ガイドレールに沿って挿入します。
基板を押し込みながら基板レバーを矢印①方向に倒すと基板を取り付けることができます。

(4) 基板レバーを矢印②の方向へ押しながら基板を手前に引くと、取り外すことができます。

<注意>
基板の取り付け後、コネクターがMB-245基板にゆるみなく接続されているか確認してください。

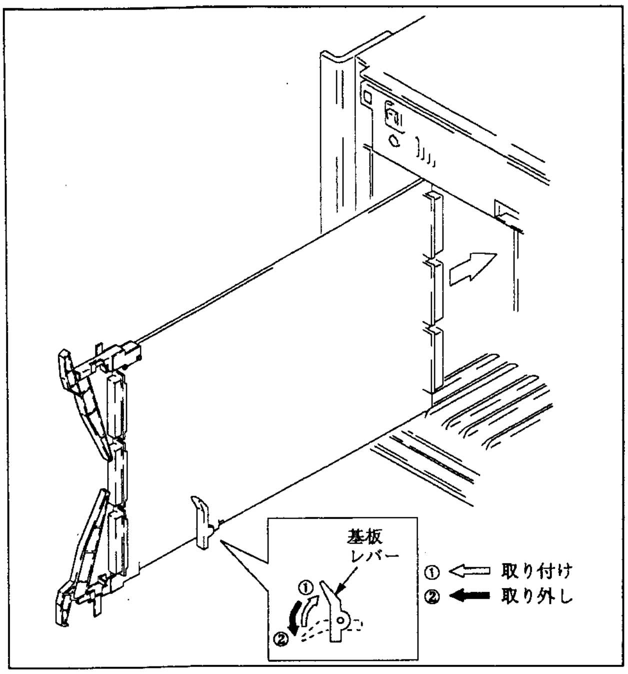


3-6. 延長基板の使用方法

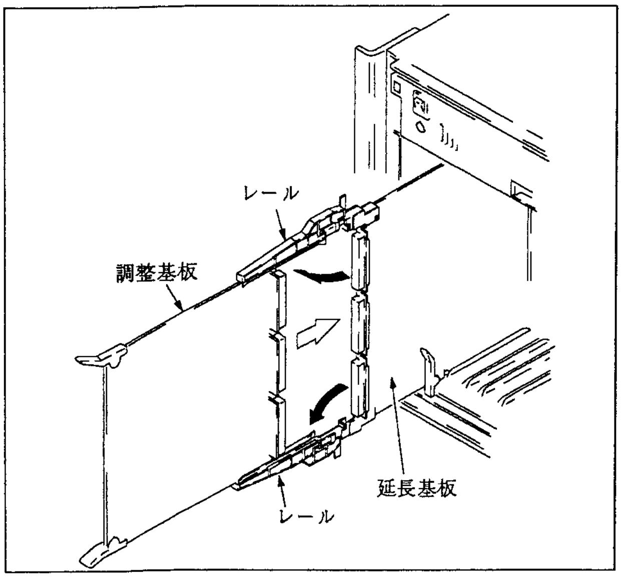
EX-209延長基板（カード基板調整用）

(1) 「3-5. 基板の取り付け•取り外し方法」の手順に従って調整を行なう基板を抜き出します。

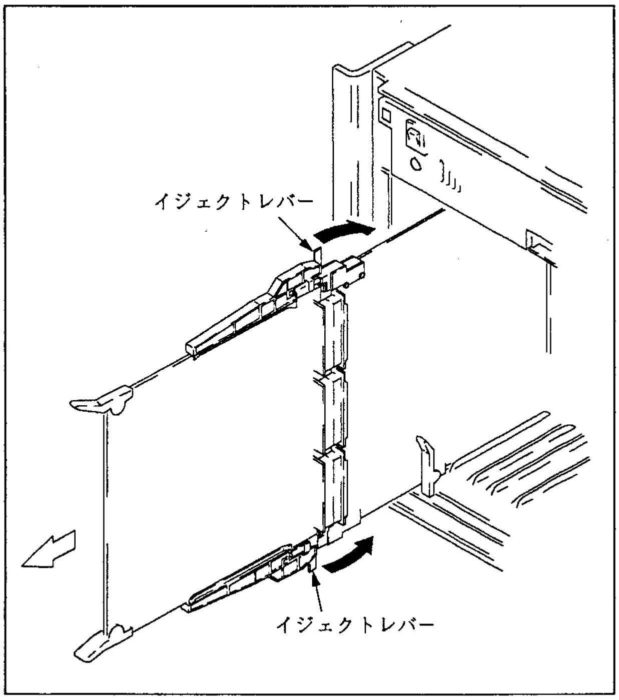
(2) 延長基板をスロットに差し込み、基板レバーを押してしっかり固定します。


基板
レバー
①
②
① ⇦ 取り付け
② ⬅ 取り外し

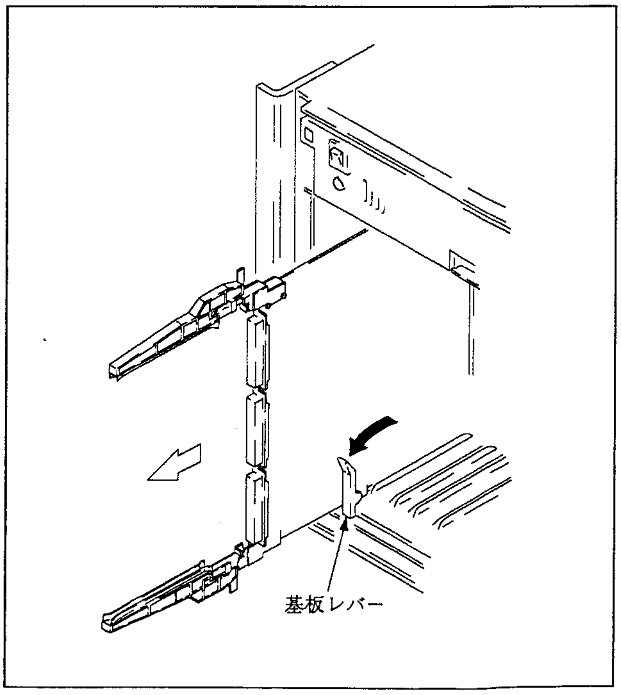
(3) 延長基板のレールを開きます。（レールロックがかかるまで完全に開いてください。）
延長基板のレールに沿って調整基板を差し込み調整を行ないます。


レール
調整基板
延長基板
レール

(4) 調整後、イジェクトレバーを矢印の方向へ押し、調整基板を手前に引き抜きます。


イジェクトレバー
イジェクトレバー

(5) 基板レバーを矢印の方向へ押し、手前に引いて延長基板を抜き出します。



3-7. サービス部品

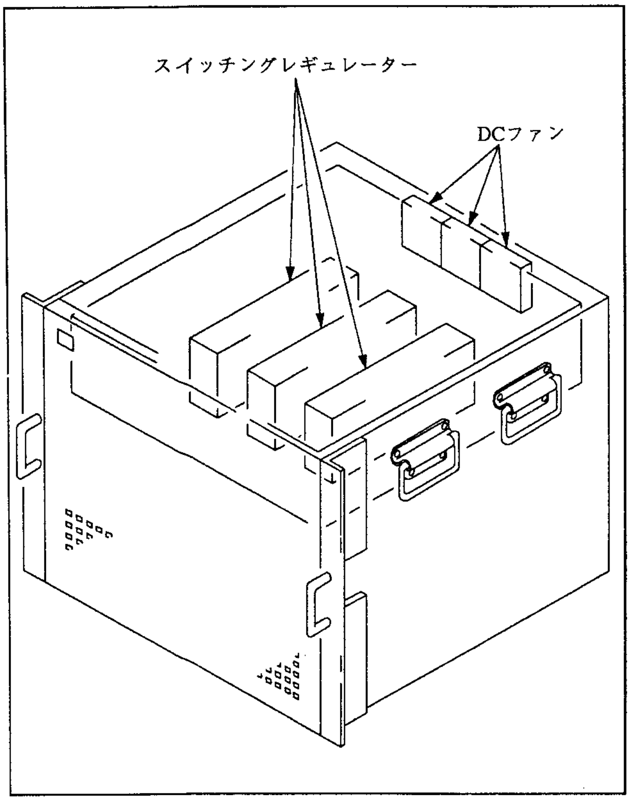
(1) 安全重要部品
回路図、分解図、電気部品リスト中で ⚠ 印及び ▨ で囲まれた部品は安全性を維持するために重要な部品です。従ってこれらの部品を交換するときには必ず指定の部品と交換してください。

(2) パーツセンターから供給される部品は、実際にセットに使用している部品と形状等がことなることがときどきあります。これらは「部品の共通化」等によるものです。

(3) 分解図、電気部品リスト中SP欄がSで示されている部品は常時在庫します。SP欄がOで示されている部品は交換頻度が低い部品ですので、在庫していないことがあり、納期が長くなることがあります。

第4章
主要部品の交換

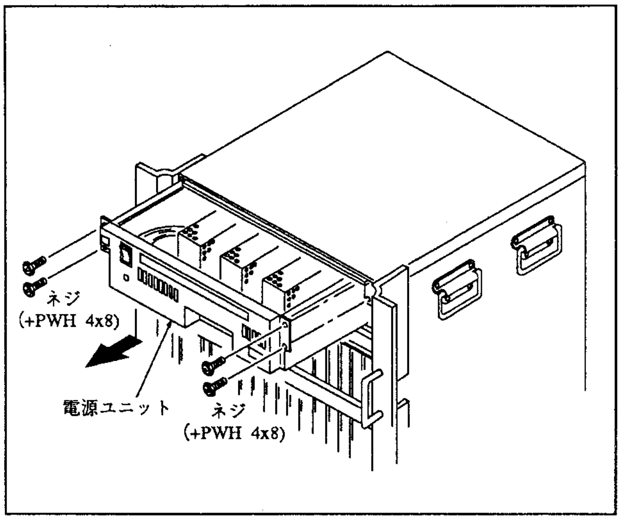
4-1. 主要部品の配置図


スイッチングレギュレーター
DCファン

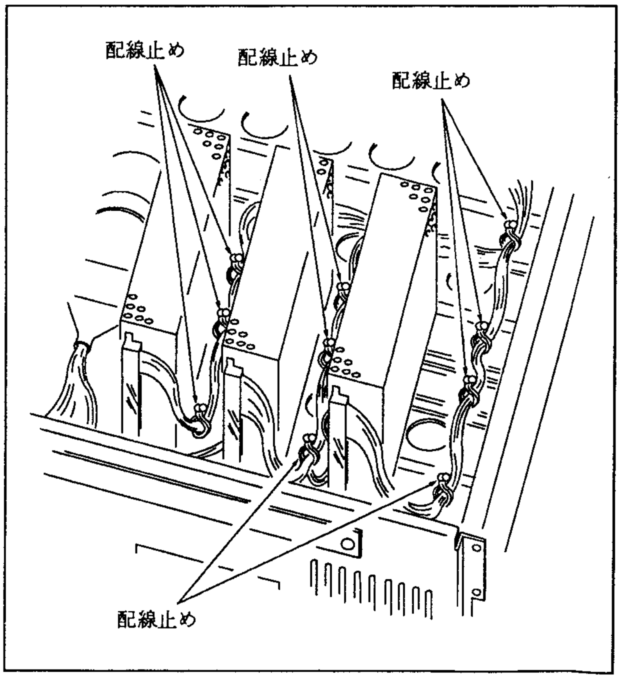
4-2. スイッチングレギュレーターの交換

(1) 3-2.と同じ手順でフロントパネルを外します。

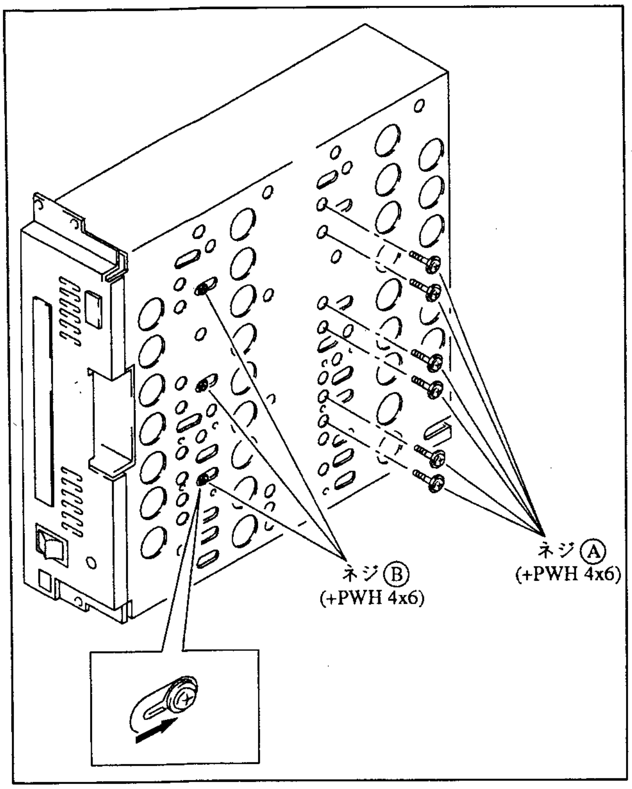
(2) ネジ4本 (+PWH 4×8) を外し、電源ユニットを手前に引き出します。


ネジ
(+PWH 4x8)
電源ユニット
ネジ
(+PWH 4x8)

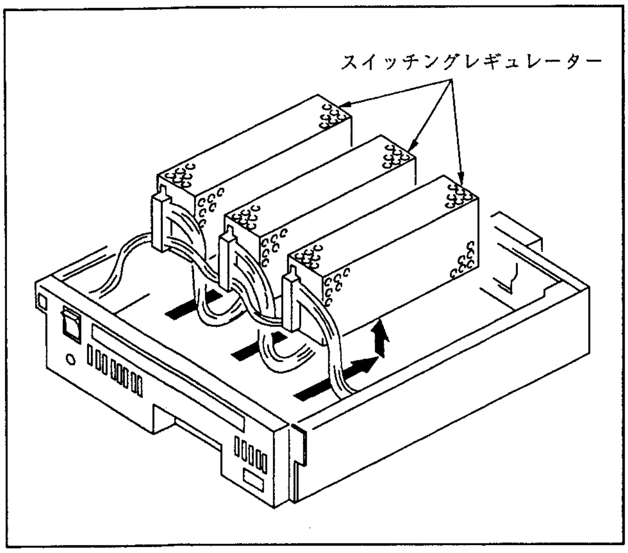
(3) 配線止め10箇所よりハーネスを外します。


配線止め
配線止め
配線止め
配線止め

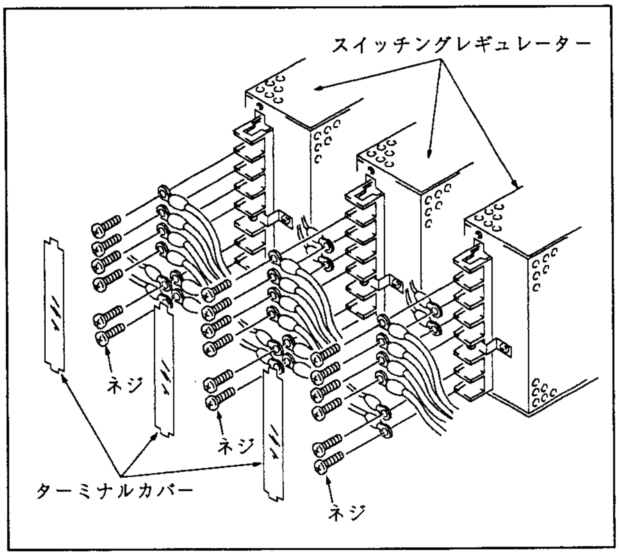
(4) ネジⒶ6本（+PWH 4x6）を外し、ネジⒷ3本（+PWH 4x6）を緩めます。


ネジⒶ
(+PWH 4x6)
ネジⒷ
(+PWH 4x6)

(5) スイッチングレギュレーターを後方へ押す様にして上へ引き上げます。


スイッチングレギュレーター

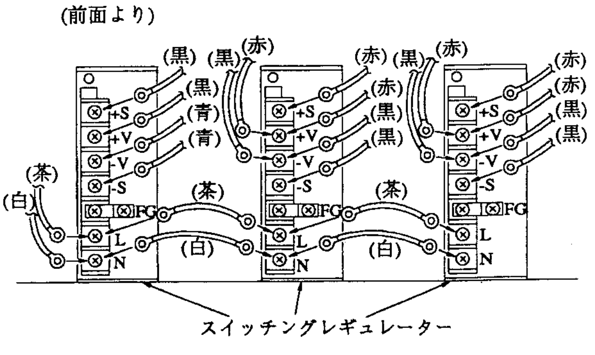
(6) スイッチングレギュレーター各々のターミナルカバーとネジ6本を外し、ハーネスを外します。


スイッチングレギュレーター
ネジ
ネジ
ターミナルカバー
ネジ

(7) スイッチングレギュレーターを取り外します。

(8) (1)〜(7) の逆の手順で新しいスイッチングレギュレーターを取り付けます。

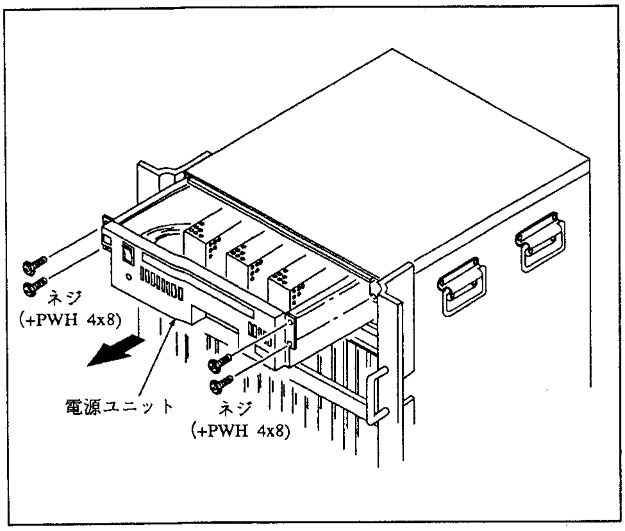
＜注意＞ ハーネスを接続する時は、下図をご参照下さい。


(前面より)
(黒)
(黒)
(赤)
(赤)
(黒)
(赤)
(赤)
(黒)
(赤)
(青)
(黒)
(赤)
(青)
(黒)
(黒)
(黒)
+S
+V
-V
-S
FG
L
N
(茶)
(白)
(茶)
(茶)
(白)
(白)
スイッチングレギュレーター

4-3. DCファンの交換

(1) 3-2. と同じ手順でフロントパネルを外します。

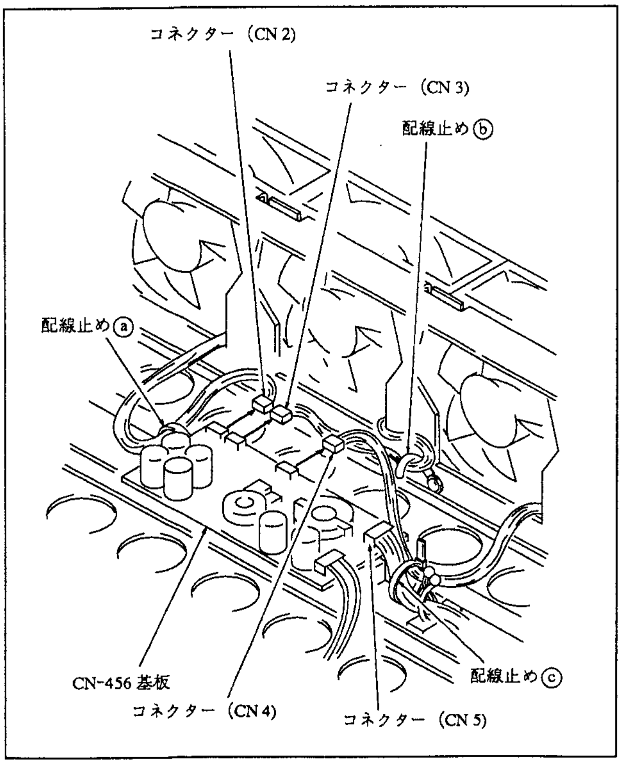
(2) ネジ4本 (+PWH 4x8) を外し、電源ユニットを手前に引き出します。


ネジ
(+PWH 4x8)
電源ユニット
ネジ
(+PWH 4x8)

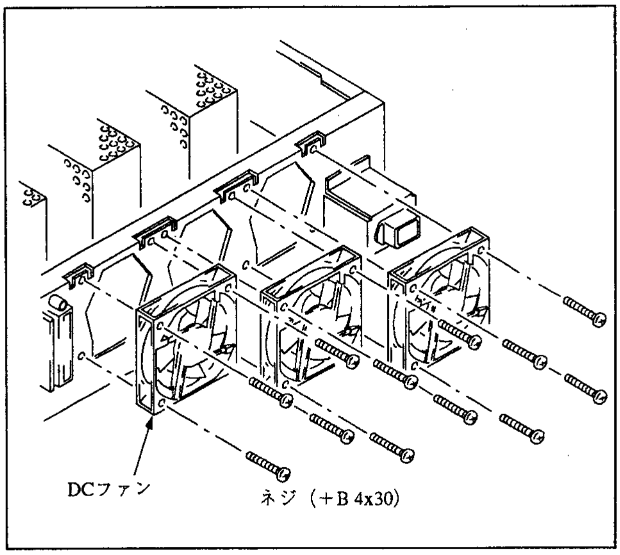
(3) 配線止め2箇所ⓐ, ⓑよりハーネスを外します。

(4) コネクター (CN4) とコネクター (CN5) を結束している配線止めⓒを切断します。

(5) CN-456基板上のコネクター3個 (CN2, CN3, CN4) を外します。


コネクター (CN 2)
コネクター (CN 3)
配線止めⓑ
配線止めⓐ
CN-456 基板
コネクター (CN 4)
配線止めⓒ
コネクター (CN 5)

(6) 各々のネジ4本 (+B 4x30) を外し、DCファンを取り外します。


DCファン
ネジ (+B 4x30)

(7) (1)〜(6) の逆の手順で新しいDCファンを取り付けます。

<注意>

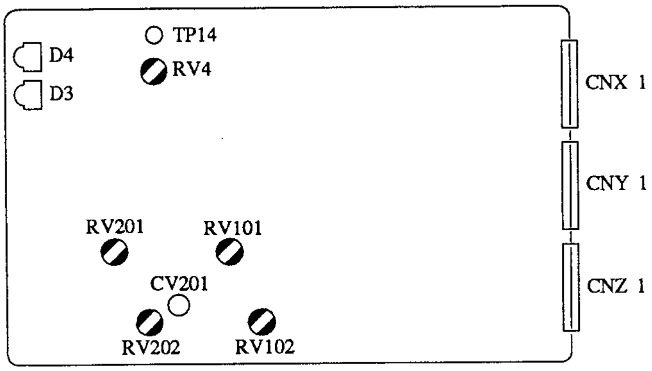
(1) ファンモーターのハーネスがファンの羽根に触れないように、(4)で切断した配線止めⓒと同等部品でCN4, CN5のハーネスを結束して下さい。

(2) 新しいDCファンを取り付けた後、ファンの固定ネジ (+B 4x30) の先端にネジロックを塗布して下さい。
(ネジのゆるみ止めのためです。)

第6章
電気調整

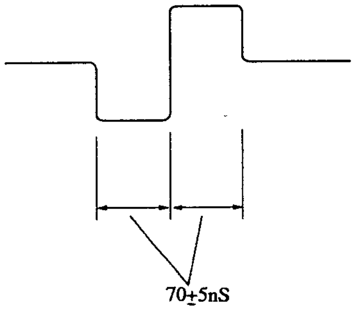
6-1. SG-153基板

RV4	REF CF
RV101	REF OUTPUT GAIN
RV102	REF OUTPUT OFFSET
RV201	MONITOR OUTPUT GAIN
RV202	MONITOR OUTPUT OFFSET
CV201	MONITOR OUTPUT FREQUENCY RESPONSE

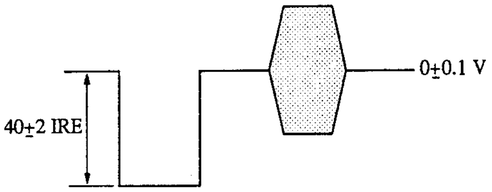

TP14
D4
RV4
D3
CNX 1
CNY 1
RV201
RV101
CV201
CNZ 1
RV202
RV102

(部品面)

6-1-1. CF (カラーフレーム) 調整

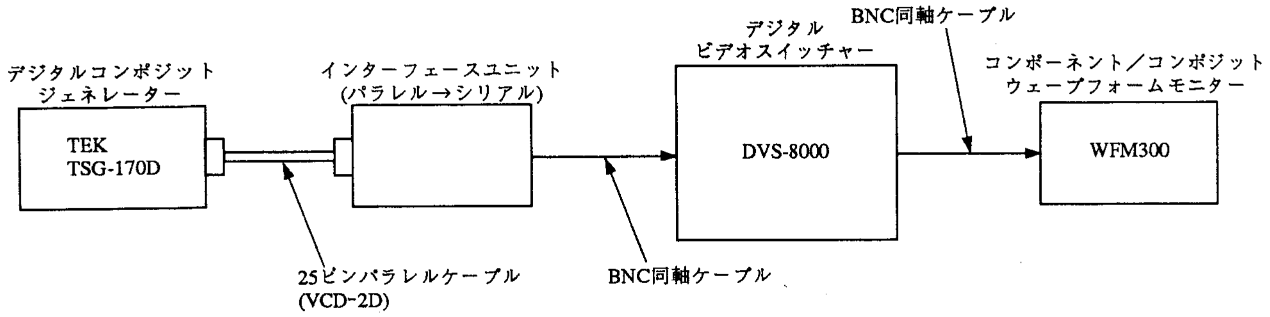
調整時の状態	規格	調整箇所
• リアパネルのREF INPUT端子にブラックバースト信号を入力する。 • D3 (CF INランプ) が点灯していることを確認する。	TP14  	⊘ RV4

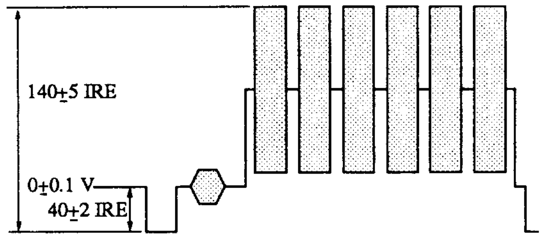
6-1-2. SYNC/ペデスタルレベル調整 (REF OUTPUT)

調整時の状態	規格	調整箇所
• リアパネルのREF INPUT端子にブラックバースト信号を入力する。	REF OUTPUT端子  0±0.1 V 40±2 IRE	SYNCレベル調整 ⊘ RV101 ペデスタルレベル調整 ⊘ RV102

6-1-3. SYNC/ペデスタルレベル調整 (MONITOR OUTPUT)

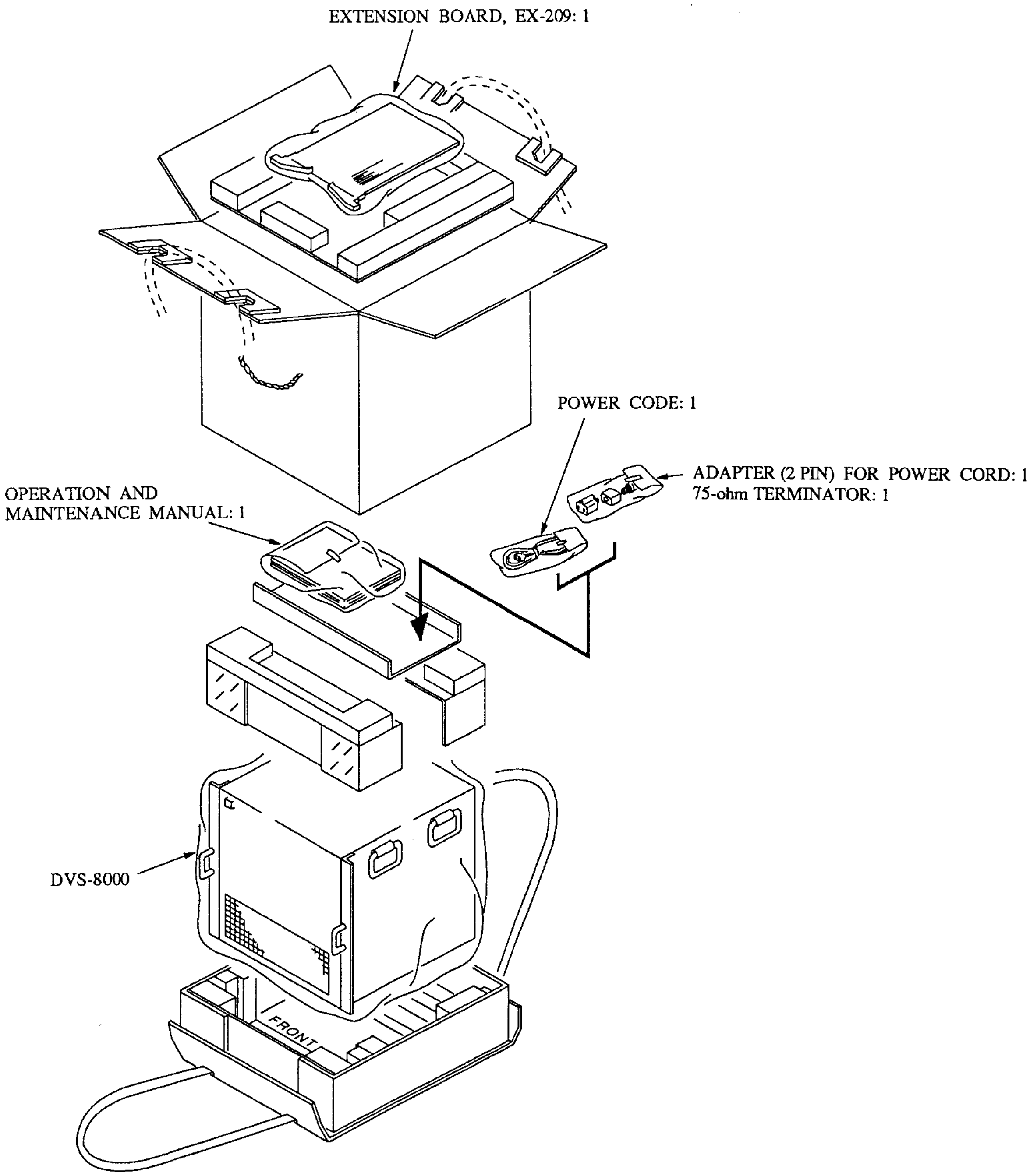
<接続>


デジタルコンポジット
ジェネレーター
TEK
TSG-170D
インターフェースユニット
(パラレル→シリアル)
デジタル
ビデオスイッチャー
DVS-8000
BNC同軸ケーブル
コンポーネント／コンポジット
ウェーブフォームモニター
WFM300
25ピンパラレルケーブル
(VCD-2D)
BNC同軸ケーブル

調整時の状態	規格	調整箇所
• リアパネルのPRIMARY INPUT端子に100%マルチバースト信号を入力する。 • コントロールパネルBKDS-8010でPVW BUSにMULTI BURSTを選択する。	MONITOR OUTPUT端子  140±5 IRE 0±0.1 V 40±2 IRE ※周波数特性：0〜5.5 MHz ± 0.5dB	SYNCレベル調整 ⊘ RV201 ペデスタルレベル調整 ⊘ RV202 周波数特性調整 ⊘ CV201

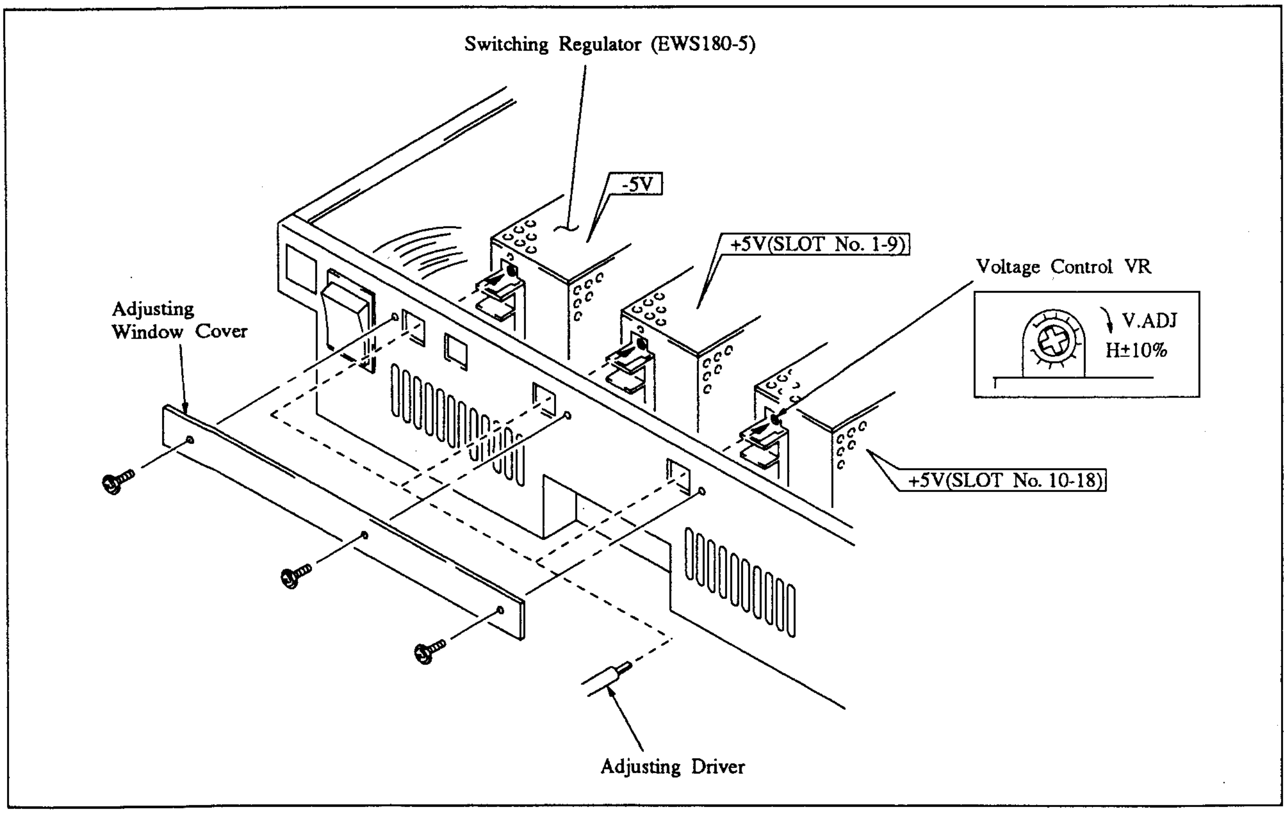
SECTION 2
INSTALLATION

2-1. UNPACKING AND REPACKING


EXTENSION BOARD, EX-209: 1
POWER CODE: 1
ADAPTER (2 PIN) FOR POWER CORD: 1
75-ohm TERMINATOR: 1
OPERATION AND
MAINTENANCE MANUAL: 1
DVS-8000
FRONT

- If the measured voltage value fails to comply with the standards, adjust the voltage using the following procedure. (Leave the digital voltmeters connected to the test terminals during adjustment.)

STEP 1. Remove the adjusting window cover of the power supply unit.
STEP 2. Insert an adjusting driver into the adjusting window and turn the voltage control VR of the switching regulator which requires adjustment.
Adjust it until obtaining an adequate voltage value on the digital voltmeter.


Switching Regulator (EWS180-5)
-5V
+5V(SLOT No. 1-9)
Voltage Control VR
V.ADJ
H±10%
Adjusting
Window Cover
+5V(SLOT No. 10-18)
Adjusting Driver

< Note >

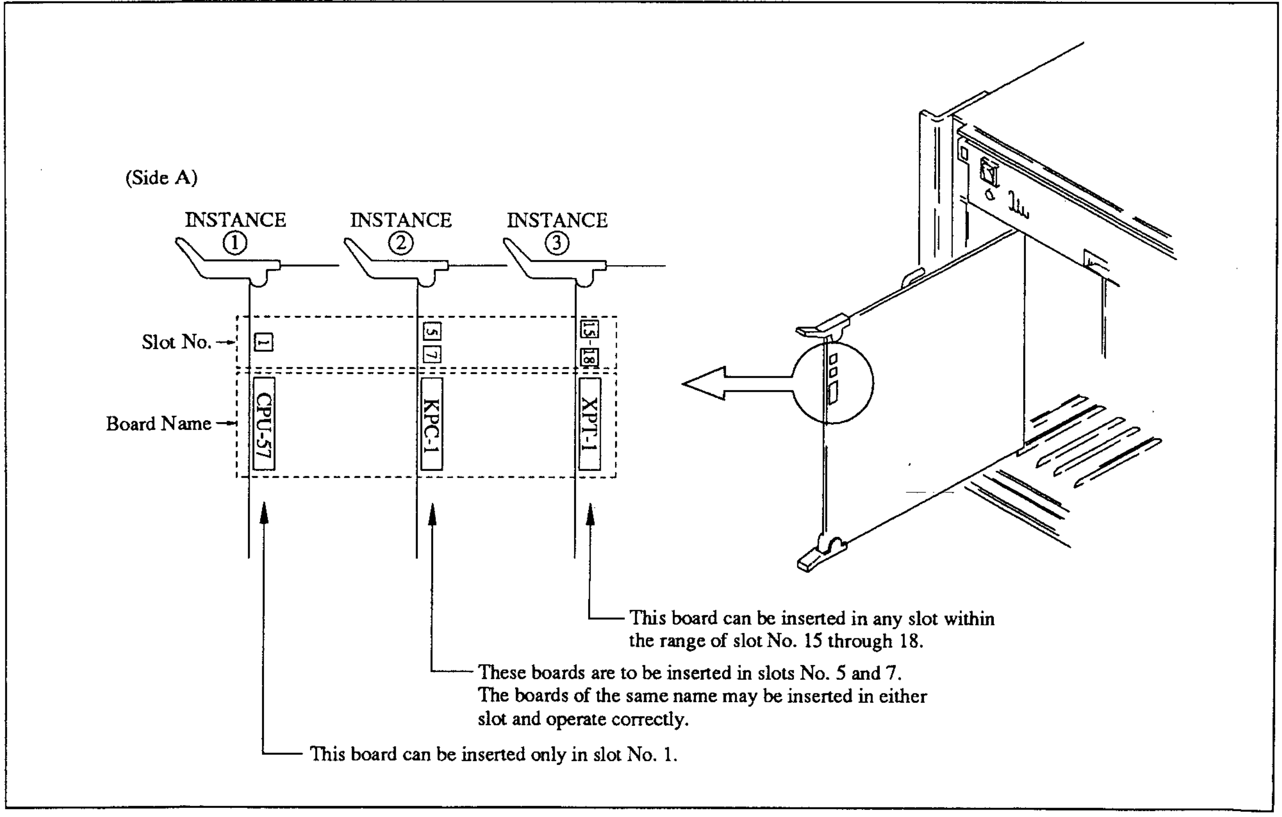
(1) Set the supply voltage after inserting all the card boards (including the option boards).
(2) Be sure to check the supply voltage again after replacing a card board.
(3) If you purchased the optional spare power supply unit BKDS-8090, you are advised to set its supply voltage in advance.
(4) Make sure that the combinations of the voltage control VRs and the test terminals are correct.

2-5-2. Installation of Card Boards

- Each card circuit board must be installed in the corresponding slot of DVS-8000. Make sure that all the boards are in the right slots by referring to the following table.

Slot No.	Board name	Slot No.	Board name
1	CPU-57	9	MIX-6
2	SG-153	10	OUT-1
3	WKG-5	11 & 12	BKDS-8030 (Option board/a pair)
4	WKG-4	13	MAT-1
5 & 7	KPC-1 (a pair)	14	BKDS-8040 (Option board)
6 & 8	MIX-4 (a pair)	15 to 18	XPT-1 or BKDS-8020, BKDS-8021 (Option board)

- The board name and the corresponding slot No. are indicated at the top of the door side on both the sides A and B of a board.



This board can be inserted in any slot within the range of slot No. 15 through 18.

These boards are to be inserted in slots No. 5 and 7. The boards of the same name may be inserted in either slot and operate correctly.

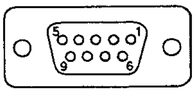
This board can be inserted only in slot No. 1.

- DVS-8000 can be used for various systems and its functions can be extended by selecting BK boards (option). Install each BK board in the specified range of slots and in the specified sequence according to the slot No. indication at the top part of the door side.

< Note >

(1) Make sure that the connector of each board is tightly connected to the MB-245 board of the main unit.
(2) A wrong installation sequence will result in a system error and disable operations.
(3) Be sure to check the supply voltage after adding a BK board.

- EDITOR A : RS-422A (D-SUB 9 PIN)

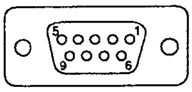


-EXT VIEW-

PIN No.	Signal name	Function
1	GND	Frame ground
2	EDT A TX-A	Transmit data (–) from DVS-8000 to EDITOR (*3)
3	EDT A RX-B	Receive data (+) from EDITOR to DVS-8000
4	GND	Common ground from EDITOR to DVS-8000
5	———	Spare
6	GND	Common ground from DVS-8000 to EDITOR
7	EDT A TX-B	Transmit data (+) from DVS-8000 to EDITOR
8	EDT A RX-A	Receive data (–) from EDITOR to DVS-8000
9	GND	Frame ground

(*3) · · · EDITING CONTROL UNIT BVE-9000, etc.

- EDITOR B : RS-422A (D-SUB 9 PIN)

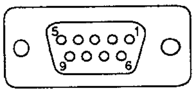


-EXT VIEW-

PIN No.	Signal name	Function
1	GND	Frame ground
2	EDT B TX-A	Transmit data (–) from DVS-8000 to EDITOR (*4)
3	EDT B RX-B	Receive data (+) from EDITOR to DVS-8000
4	GND	Common ground from EDITOR to DVS-8000
5	———	Spare
6	GND	Common ground from DVS-8000 to EDITOR
7	EDT B TX-B	Transmit data (+) from DVS-8000 to EDITOR
8	EDT B RX-A	Receive data (–) from EDITOR to DVS-8000
9	GND	Frame ground

(*4) · · · BVE-9000, etc.

- DME : RS-422A (D-SUB 9 PIN)

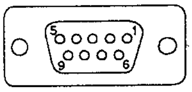


-EXT VIEW-

PIN No.	Signal name	Function
1	GND	Frame ground
2	DME TX-A	Transmit data (–) from DVS-8000 to DME (*5)
3	DME RX-B	Receive data (+) from DME to DVS-8000
4	GND	Common ground from DME to DVS-8000
5	———	Spare
6	GND	Common ground from DVS-8000 to DME
7	DME TX-B	Transmit data (+) from DVS-8000 to DME
8	DME RX-A	Receive data (–) from DME to DVS-8000
9	GND	Frame ground

(*5) · · · DIGITAL MULTI EFFECTS DME-5000, etc.

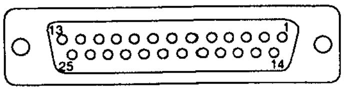
- AUX BUS (REMOTE) : RS-422A (D-SUB 9 PIN)



-EXT VIEW-

PIN No.	Signal name	Function
1	GND	Frame ground
2	AUX TX-A	Transmit data (–) from DVS-8000 to AUX BUS REMOTE
3	AUX RX-B	Receive data (+) from AUX BUS REMOTE to DVS-8000
4	GND	Common ground from AUX BUS REMOTE to DVS-8000
5	———	Spare
6	GND	Common ground from DVS-8000 to AUX BUS REMOTE
7	AUX TX-B	Transmit data (+) from DVS-8000 to AUX BUS REMOTE
8	AUX RX-A	Receive data (–) from AUX BUS REMOTE to DVS-8000
9	GND	Frame ground

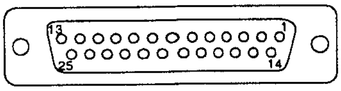
• TERMINAL : RS-232C (D-SUB 25 PIN)



—EXT VIEW—

PIN No.	Signal name	Function
1	GND	Frame ground
2	RXD	Receive data
3	TXD	Transmit data
4	CTS	Transmit enable
5	RTS	Transmit request
6	———	NC
7	GND	Ground
8	———	NC
9	———	
10	———	
11	———	
12	———	
13	———	
14	———	
15	———	
16	———	
17	———	
18	———	
19	———	
20	———	
21	———	
22	———	
23	———	
24	———	
25	———	

- GPI : (D-SUB 25 PIN) INPUT×8, TTL
  OUTPUT×7, Relay contact 30 V 100 mA (at the resistance load)



−EXT VIEW−

PIN No.	Signal name	Function
1	GND	Ground
2	GND	Ground
3	GPI IN 2	General-purpose input
4	GPI IN 4	
5	GPI IN 6	
6	GPI IN 8	
7	GPI OUT 1B	General-purpose output
8	GPI OUT 2B	
9	GPI OUT 3B	
10	GPI OUT 4B	
11	GPI OUT 5B	
12	GPI OUT 6B	
13	GPI OUT 7B	
14	GND	Ground
15	GPI IN 1	General-purpose input
16	GPI IN 3	
17	GPI IN 5	
18	GPI IN 7	
19	GPI OUT 1A	General-purpose output
20	GPI OUT 2A	
21	GPI OUT 3A	
22	GPI OUT 4A	
23	GPI OUT 5A	
24	GPI OUT 6A	
25	GPI OUT 7A	

※ A and B of the same number constitute a pair of relay contacts.

- REF INPUT : BNC connector, loop through
  ANALOG BLACK BURST 0±3 dB
- REF OUTPUT : BNC connector, 75Ω
  ANALOG BLACK BURST 0±3 dB
- MONITOR OUTPUT: BNC connector, 75Ω
  ANALOG 1.0 Vp-p±3 dB
- ME-1 OUTPUTS : BNC connector, 75Ω
  [PGM], [PVW] SERIAL DIGITAL 800 mV±10%
- ME-2 OUTPUTS : BNC connector, 75Ω
  [PGM], [PVW] SERIAL DIGITAL 800 mV±10%
- PGM OUTPUTS : BNC connector, 75Ω
  [1]~[4] SERIAL DIGITAL 800 mV±10%
- CLEAN OUTPUT : BNC connector, 75Ω
  SERIAL DIGITAL 800 mV±10%
- PVW OUTPUT : BNC connector, 75Ω
  SERIAL DIGITAL 800 mV±10%
- AUX BUS OUTPUTS : BNC connector, 75Ω
  [1]~[4] SERIAL DIGITAL 800 mV±10%
- EDIT PVW OUTPUTS : BNC connector, 75Ω
  [1], [2] SERIAL DIGITAL 800 mV±10%
- CHROMA KEY INPUTS : BNC connector, 75Ω
  [Y/G], [B-Y/B] ANALOG COMPONENT
  [R-Y/R], [SYNC]
- PRIMARY INPUTS : BNC connector, 75Ω
  [1]~[32] SERIAL DIGITAL 800 mV±10%
  or ANALOG COMPOSITE 0±3 dB

2-8. RACK MOUNTING

- DVS-8000 can be mounted in a standard 19 inch rack. Be sure to use the rack mount rail RMM-18DV available as an option.

<Necessary parts>

- Rack mount rail RMM-18DV
- 8 screws for locking flat nut/long type (+B 4×8)
- 4 screws for rack mounting (+RK 5×16)
- 4 decorative washers for rack mounting
  (Sony Parts No. 2-297-913-01)

<Cautions>

(1) If you mount DVS-8000 or a related model in a 19 inch standard rack, you are advised to install a ventilation fan to prevent a temperature rise in the rack.
Make sure that all the sets in the rack can be operated within the temperature range of 5℃ to 40℃.

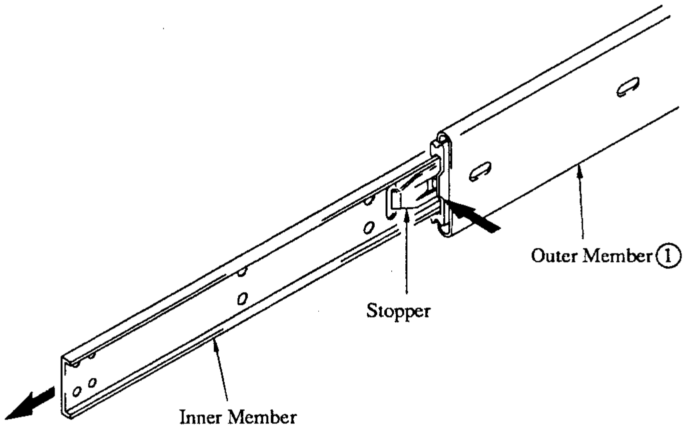
(2) Be sure to use the recommended rail. The set cannot be locked completely to a rack by rack angles alone.

(3) You are advised to lock the rack to the floor with strong bolts. When you pull out the set from the rack, the bolts will prevent its fall.

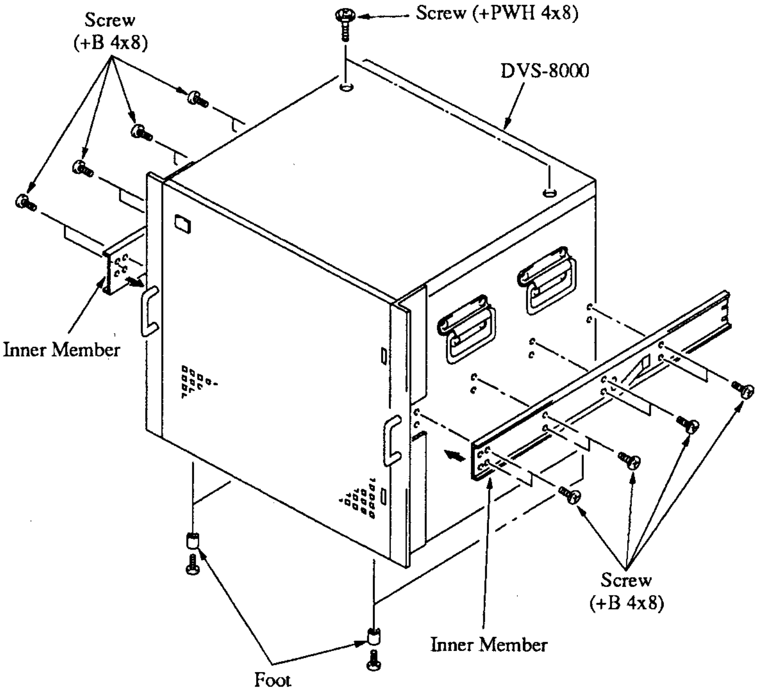
(4) An installation manual is packed with the rack mount rail RMM-18DV. The method for mounting the DVR Series VTR on a rack is explained. Since the rack mounting procedure of DVS-8000 differs somewhat from that of VTR, follow the instructions in this manual.

< Mounting procedure >

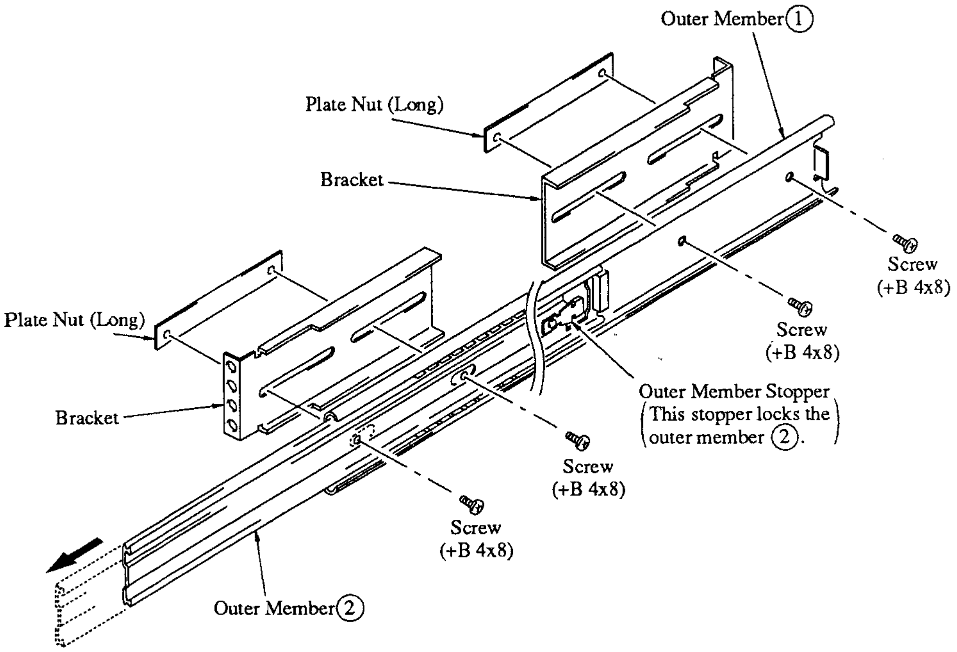
(1) Pull out the inner member while pressing the stopper of the rack mount rail RMM-18DV.


Outer Member ①
Stopper
Inner Member

(2) Fix the inner members to the set using the 16 screws (+B 4x8) supplied as an accessory to the RMM-18DV.
Remove the 2 screws (+PWH 4x8) on the top panel.
Remove the 4 feet of the set as required.


Screw (+B 4x8)
Screw (+PWH 4x8)
DVS-8000
Inner Member
Screw (+B 4x8)
Inner Member
Foot

(3) Fix the brackets to the outer member ① temporarily by using 8 screws (+B 4x8). Move the outer member ② back and forth so that the screw holes of the outer member ① can be seen.


Outer Member①
Plate Nut (Long)
Bracket
Screw
(+B 4x8)
Screw
(+B 4x8)
Plate Nut (Long)
Bracket
Outer Member Stopper
(This stopper locks the outer member ②.)
Screw
(+B 4x8)
Screw
(+B 4x8)
Outer Member②

(4) Fix the outer member assembly to RMM-18DV temporarily by using 4 screws (C 4x12) and 4 wahsers (W4) supplied as accessories. At this time, adjust the outer member position. After adjusting the outer member position, tighten the screws (+B 4x8) which were locked temporarily in step (3).

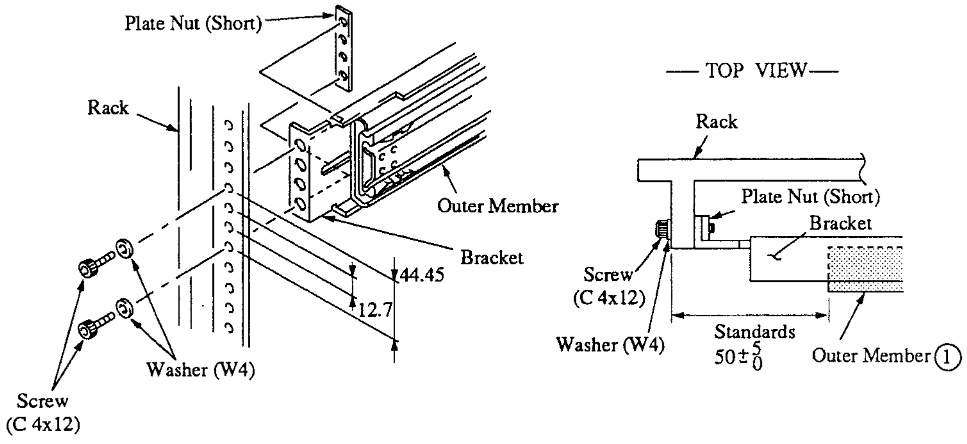
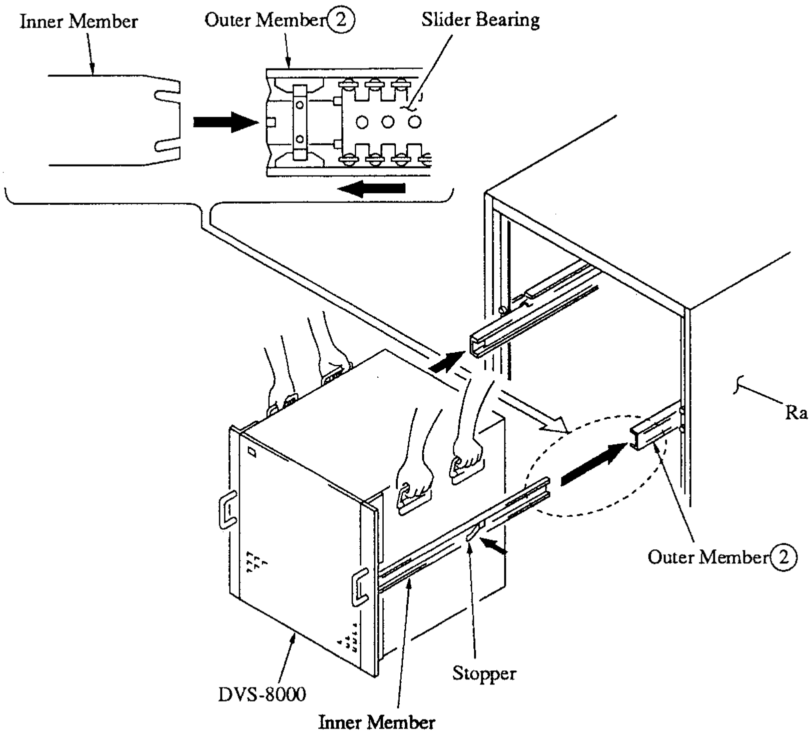


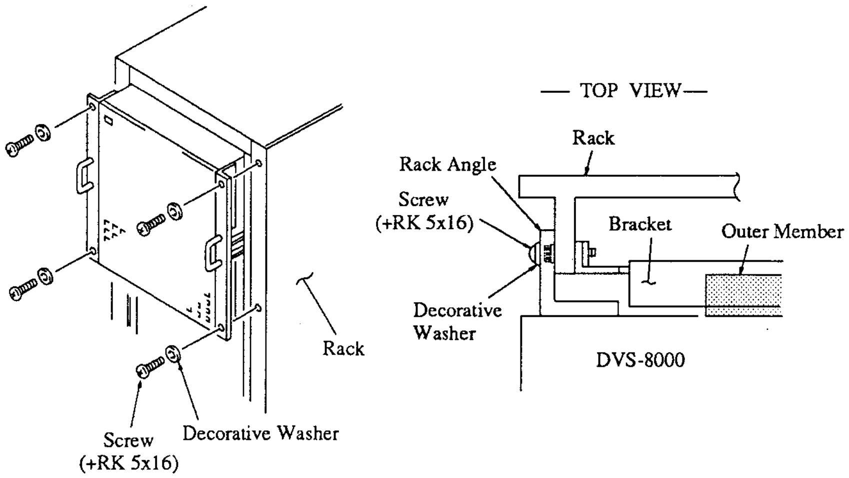
Plate Nut (Short)
Rack
Outer Member
Bracket
44.45
12.7
Washer (W4)
Screw
(C 4x12)
— TOP VIEW—
Rack
Plate Nut (Short)
Bracket
Screw
(C 4x12)
Washer (W4)
Standards
50±5 0
Outer Member①

(5) Before housing the set, release the stoppers of the inner member. After making sure that the set can be housed smoothly, tighten the screws (C 4×12) which were locked temporarily in step (4).

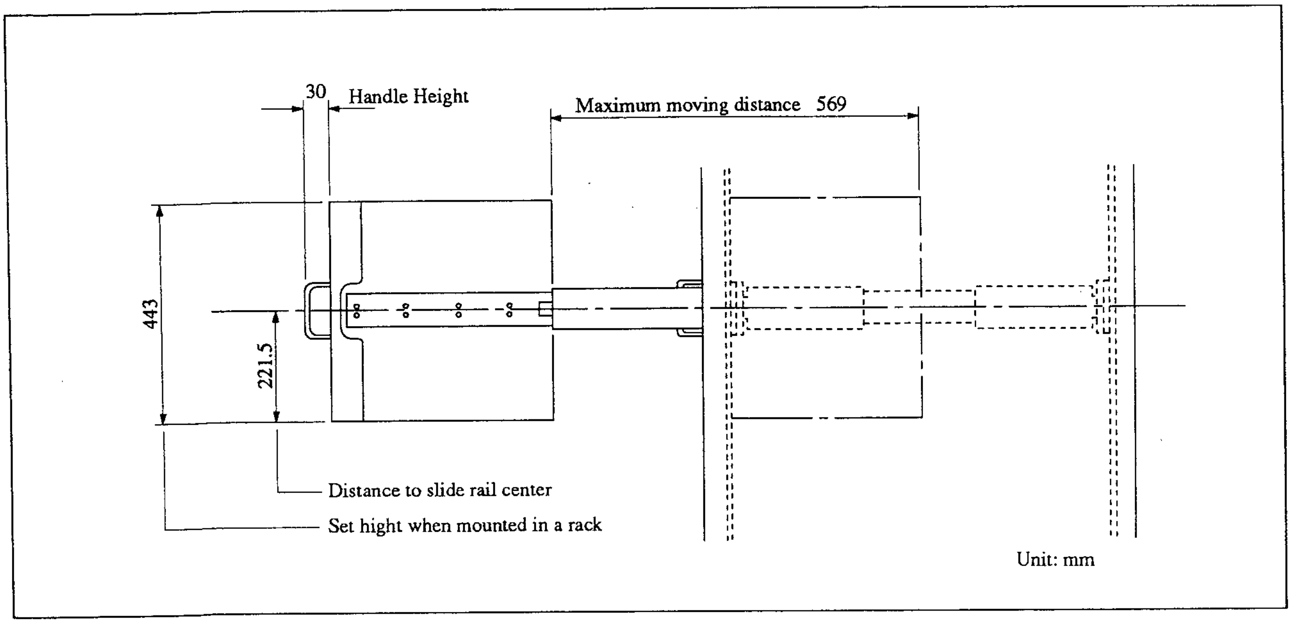
· When housing the set, shift the slide bearing as illustrated.


Inner Member
Outer Member②
Slider Bearing
Rack
Outer Member②
Stopper
DVS-8000
Inner Member

(6) After housing the set, lock the set to the rack by using 4 screws (+RK 5x16) and 4 decorative washers.


Rack
Screw
(+RK 5x16)
Decorative Washer
— TOP VIEW—
Rack
Rack Angle
Screw
(+RK 5x16)
Bracket
Outer Member
Decorative
Washer
DVS-8000

- When DVS-8000 is mounted in a rack, the maximum moving distance is as illustrated below.


30
Handle Height
Maximum moving distance 569
443
221.5
Distance to slide rail center
Set hight when mounted in a rack
Unit: mm

2-9. SUPPLIED ACCESSORIES

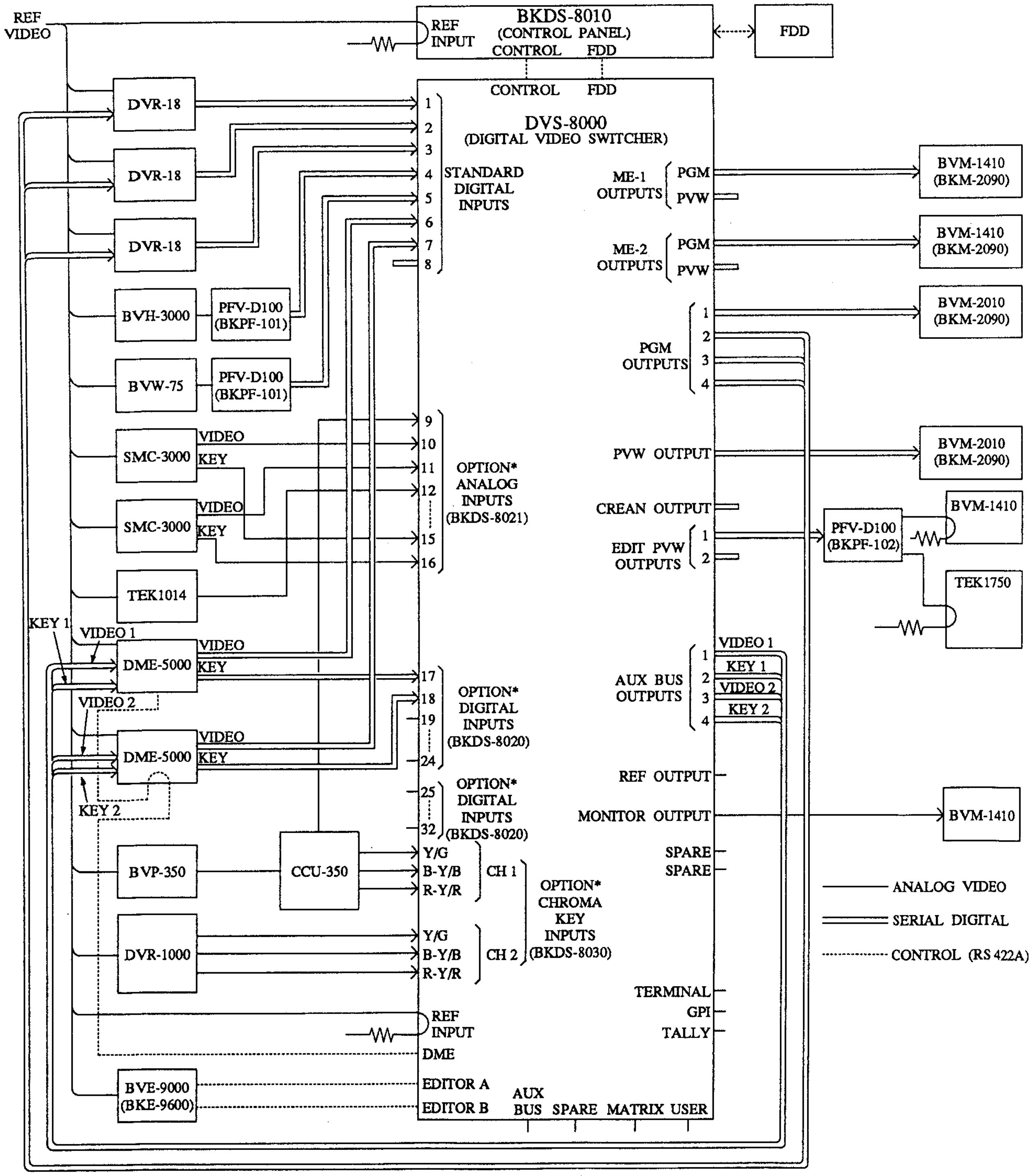
Parts name	Parts No.	Quantity
Extension board (EX-209)	A-6279-727-A	1
Power cord	1-551-812-11	1
Adapter (2 PIN) for power cord	1-506-411-21 2-990-242-01	1 set
75-ohm terminator	1-569-221-11	1
Operation and maintenance manual	3-166-848-01	1

2-10. OPTIONAL ACCESSORIES

The following optional accessories are available for DVS-8000.

- BKDS-8010 : CONTROL PANEL
- BKDS-8020 : DIGITAL INPUT BOARD
- BKDS-8021 : ANALOG INPUT BOARD
- BKDS-8030 : CLEAN CHROMA KEY BOARD (a pair)
- BKDS-8040 : FRAME MEMORY BOARD
- BKDS-8090 : SPARE POWER SUPPLY UNIT

2-11. EXAMPLE OF SYSTEM CONNECTION


REF VIDEO
BKDS-8010
(CONTROL PANEL)
REF INPUT
CONTROL
FDD
FDD
CONTROL
FDD
DVS-8000
(DIGITAL VIDEO SWITCHER)
DVR-18
DVR-18
DVR-18
BVH-3000
PFV-D100
(BKPF-101)
BVW-75
PFV-D100
(BKPF-101)
SMC-3000
VIDEO
KEY
SMC-3000
VIDEO
KEY
TEK1014
KEY 1
VIDEO 1
DME-5000
VIDEO
KEY
VIDEO 2
DME-5000
VIDEO
KEY
KEY 2
BVP-350
CCU-350
DVR-1000
BVE-9000
(BKE-9600)
1
2
3
4
5
6
7
8
STANDARD DIGITAL INPUTS
9
10
11
12
15
16
OPTION* ANALOG INPUTS (BKDS-8021)
17
18
19
24
OPTION* DIGITAL INPUTS (BKDS-8020)
25
32
OPTION* DIGITAL INPUTS (BKDS-8020)
Y/G
B-Y/B
R-Y/R
CH 1
Y/G
B-Y/B
R-Y/R
CH 2
OPTION* CHROMA KEY INPUTS (BKDS-8030)
REF INPUT
DME
EDITOR A
EDITOR B
AUX BUS
SPARE
MATRIX
USER
ME-1 OUTPUTS
PGM
PVW
ME-2 OUTPUTS
PGM
PVW
PGM OUTPUTS
1
2
3
4
PVW OUTPUT
CREAN OUTPUT
EDIT PVW OUTPUTS
1
2
AUX BUS OUTPUTS
1
2
3
4
VIDEO 1
KEY 1
VIDEO 2
KEY 2
REF OUTPUT
MONITOR OUTPUT
SPARE
SPARE
TERMINAL
GPI
TALLY
BVM-1410
(BKM-2090)
BVM-1410
(BKM-2090)
BVM-2010
(BKM-2090)
BVM-2010
(BKM-2090)
PFV-D100
(BKPF-102)
BVM-1410
TEK1750
BVM-1410
ANALOG VIDEO
SERIAL DIGITAL
CONTROL (RS 422A)

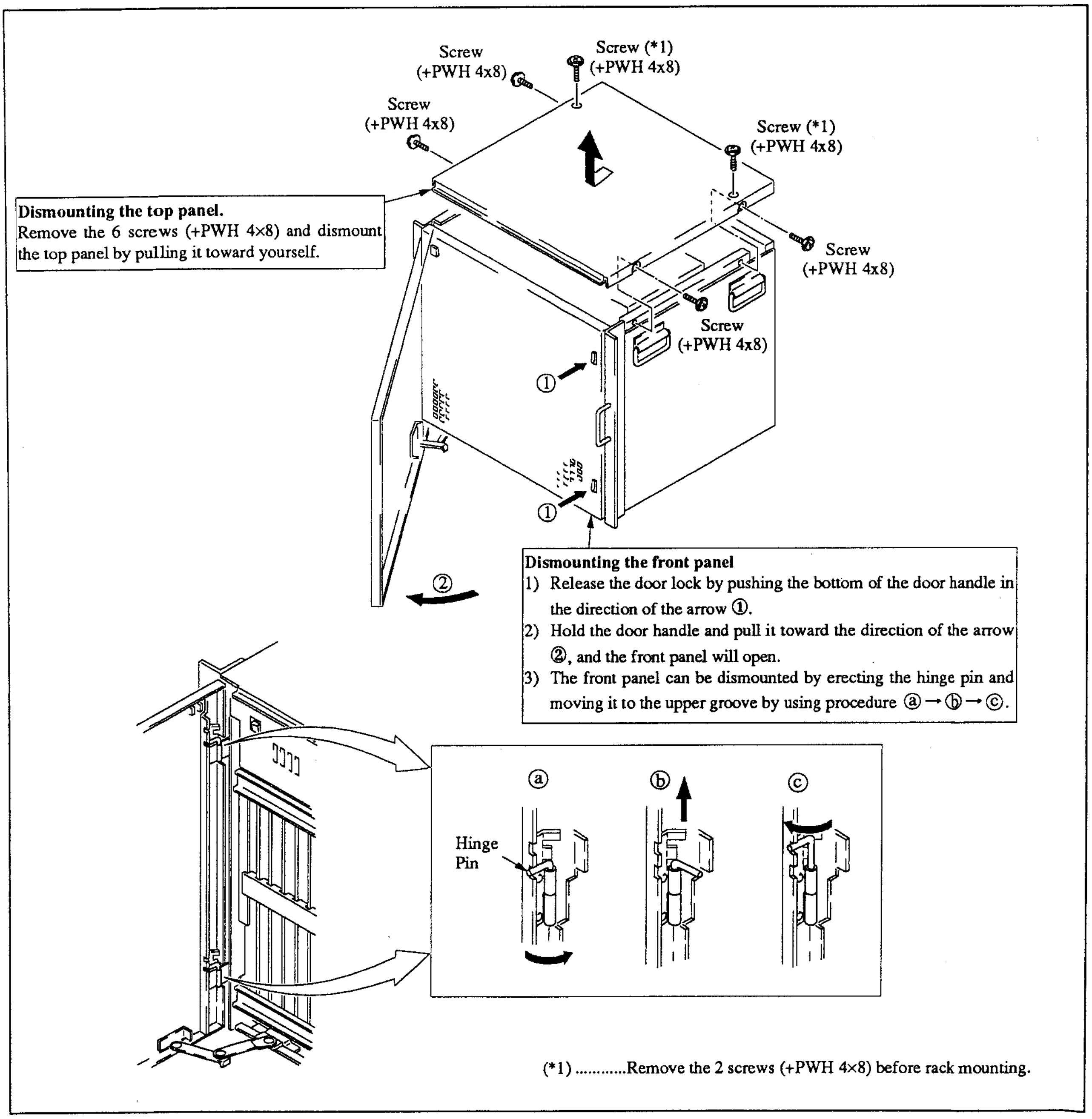
SECTION 3
SERVICE INFORMATION

3-1. DISMOUNTING FROM RACK

- Disconnect all the cables of the connector panel and remove the rack mounting screws. Then, pull out the handle of the angle.

<Note>
At least two men should work together to pull out the set from the rack. This is necessary to prevent falls.

3-2. REMOVAL OF PANELS


Screw
(+PWH 4x8)
Screw (*1)
(+PWH 4x8)
Screw
(+PWH 4x8)
Screw (*1)
(+PWH 4x8)
Screw
(+PWH 4x8)
Screw
(+PWH 4x8)
①
①
②
ⓐ
ⓑ
ⓒ
Hinge
Pin

Dismounting the top panel.
Remove the 6 screws (+PWH 4×8) and dismount the top panel by pulling it toward yourself.

Dismounting the front panel

1) Release the door lock by pushing the bottom of the door handle in the direction of the arrow ①.
2) Hold the door handle and pull it toward the direction of the arrow ②, and the front panel will open.
3) The front panel can be dismounted by erecting the hinge pin and moving it to the upper groove by using procedure ⓐ → ⓑ → ⓒ.

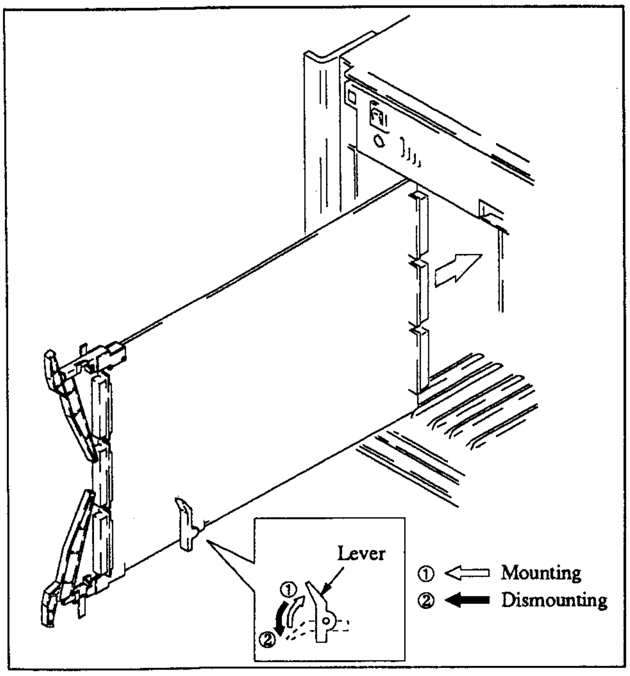
(*1) ....Remove the 2 screws (+PWH 4×8) before rack mounting.

3-6. HOW TO USE THE EXTENSION BOARD

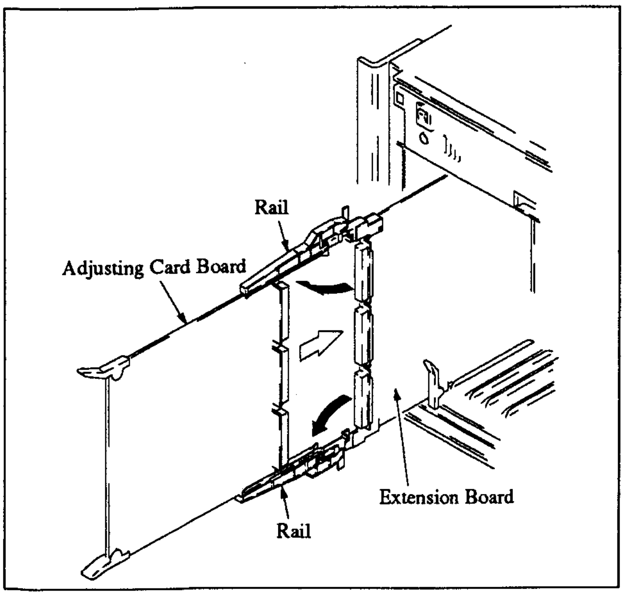
EX-209 extension board (used for adjusting card board)

(1) Pull out the board to be adjusted by following the instructions in 3-5. How to Install and Remove the Board.

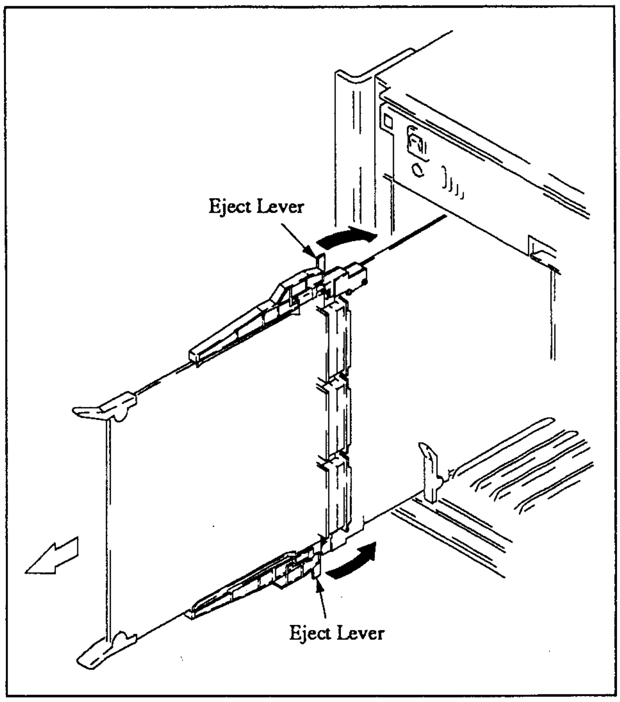
(2) Insert an extension board into the slot and lock it firmly by pressing the board lever.


Lever
①
②
① ⇐ Mounting
② ← Dismounting

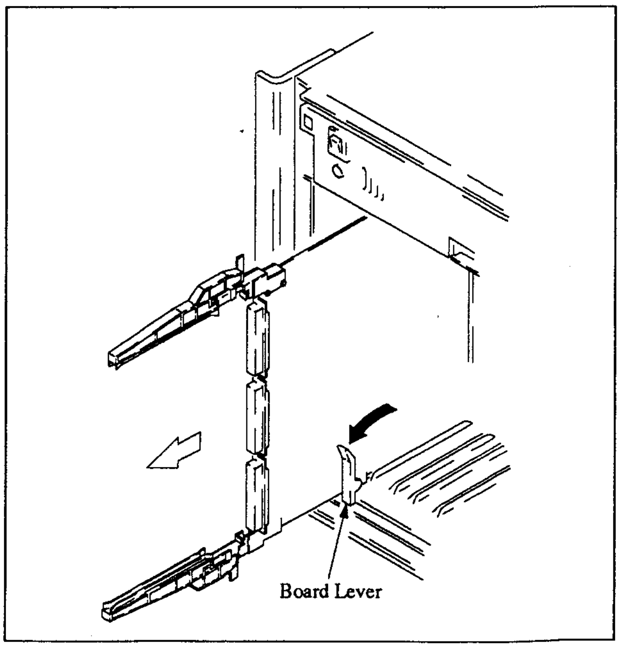
(3) Open the rail of the extension board. (Open it completely until it is locked.) Insert the board to be adjusted along the rail of the extension board and adjust the board.


Rail
Adjusting Card Board
Extension Board
Rail

(4) After adjusting the board, push the eject lever in the direction of the arrow and pull out the adjusted board toward yourself.


Eject Lever
Eject Lever

(5) Push the board lever in the direction of the arrow and pull out the extension board by pulling it toward yourself.


Board Lever

3-7. SERVICE PARTS

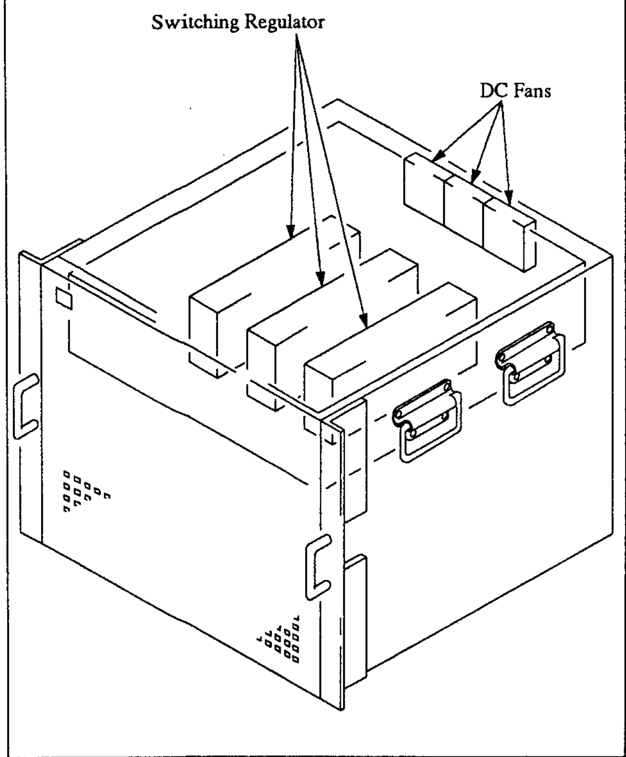
(1) **Safety Related on Components Warning**
Components with ⚠ on the schematic diagrams, exploded views and electrical spare parts list are to maintain safe operation. Replace these components with Sony parts specified in this manual or in service manual supplements published by Sony.

(2) **Standardization of Parts**
Replacement Parts supplied from Sony Parts Center may sometimes have different shape and outside view from the parts witch actually in use. This is due to "standardization of genuine parts". This manual's exploded view and electrical spare parts list are indicating the part numbers of "the standardized genuine parts at present".

(3) **Stocked of Parts**
The parts marked with "s" in the SP column of the exploded views and electrical spare parts lists are normally stocked for customer's inquiry. However, orders for parts, marked with "o" may not be ready which require additional delivery time when ordered.

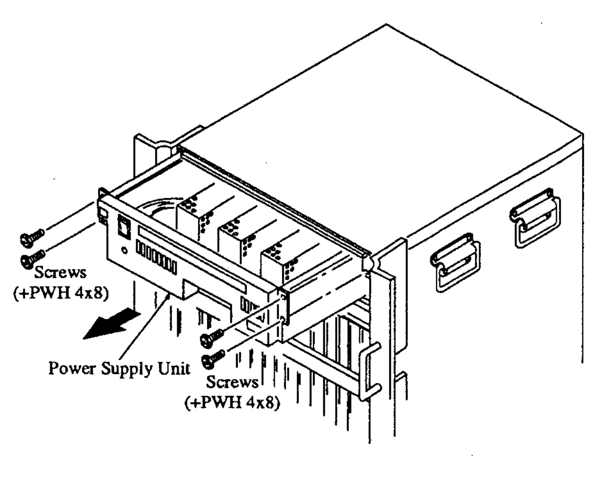
SECTION 4
REPLACEMENT OF MAIN PARTS

4-1. LOCATION OF THE MAIN PARTS

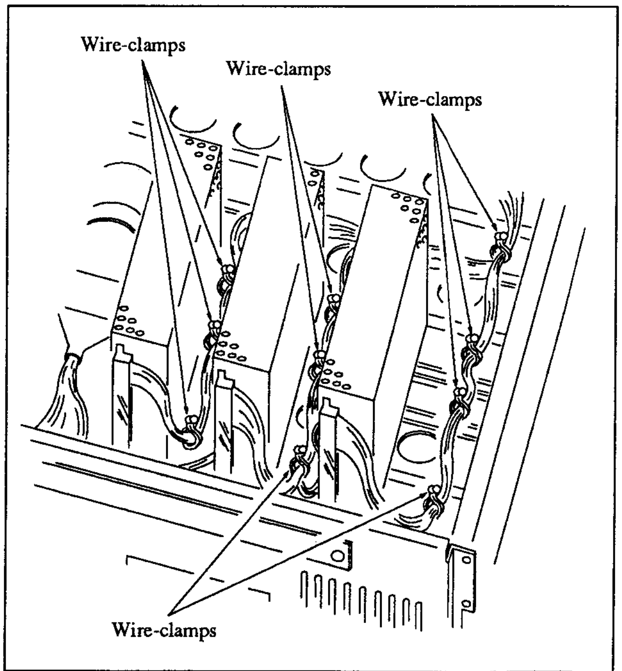

Switching Regulator
DC Fans

4-2. REPLACEMENT OF THE SWITCHING REGULATORS

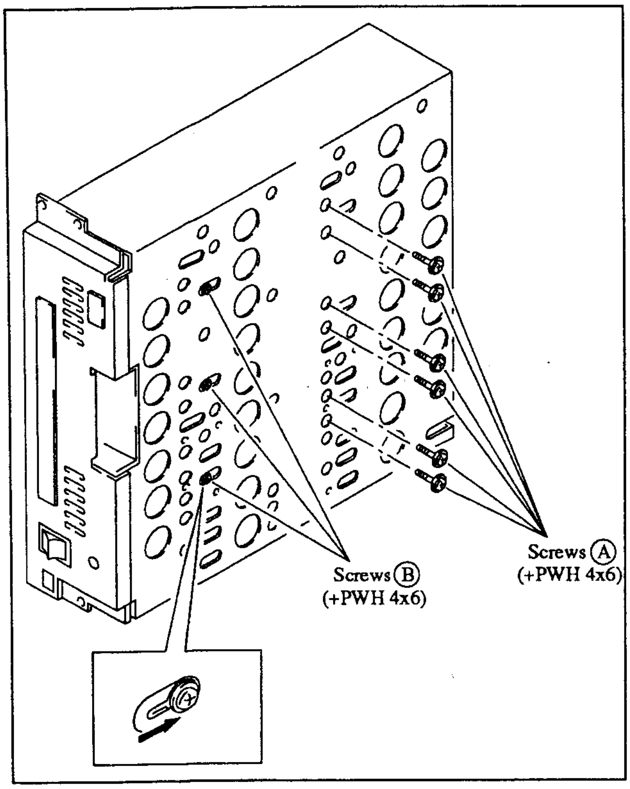
(1) Remove the front panel by the same procedure as that of 3-2.
(2) Remove the 4 screws (+PWH 4x8) and pull the power supply unit towards the front.


Screws
(+PWH 4x8)
Power Supply Unit
Screws
(+PWH 4x8)

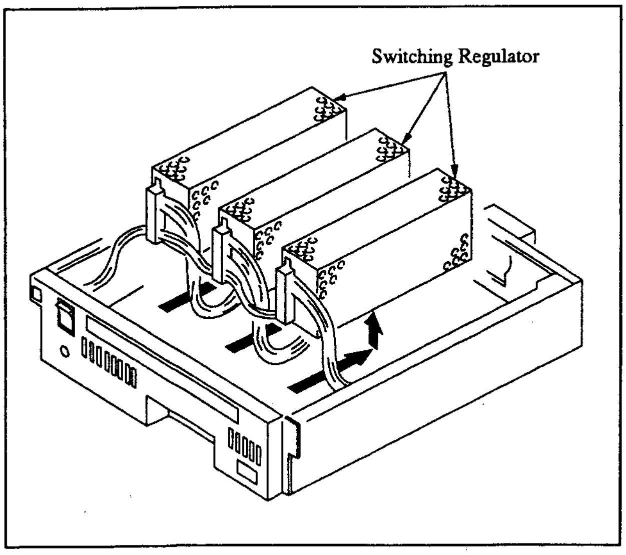
(3) Remove the harness from the 10 wire-clamps.


Wire-clamps
Wire-clamps
Wire-clamps
Wire-clamps

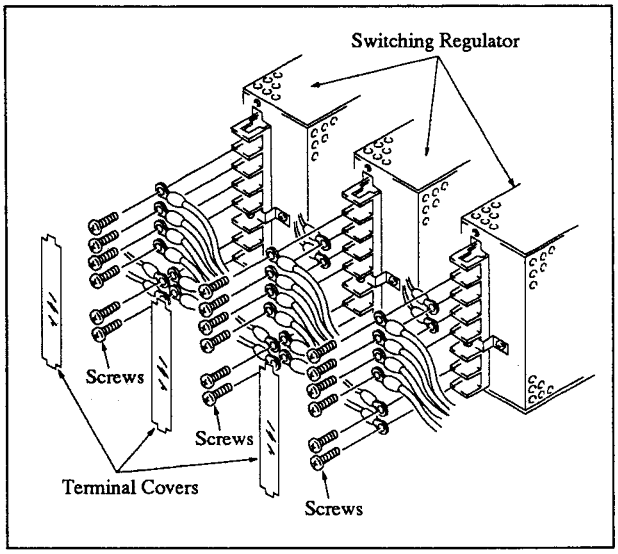
(4) Remove the 6 screws Ⓐ (+PWH 4x6) and loosen the 3 set screws Ⓑ (+PWH 4x6).


Screws Ⓑ
(+PWH 4x6)
Screws Ⓐ
(+PWH 4x6)

(5) Lift up the switching regulator while pushing it towards the back.


Switching Regulator

(6) Remove the terminal covers of the switching regulator and the 6 set screws, and then remove the harness.

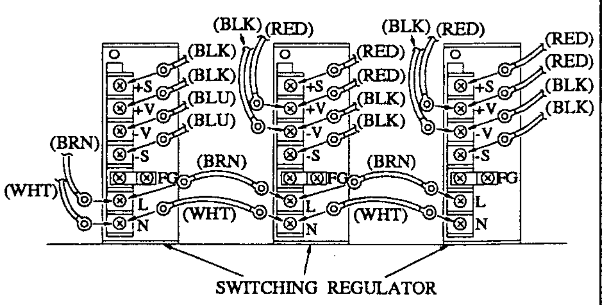

Switching Regulator
Screws
Screws
Terminal Covers
Screws

(7) Remove the switching regulator.

(8) Install a new switching regulator in the reverse sequence of procedures (1) through (7).

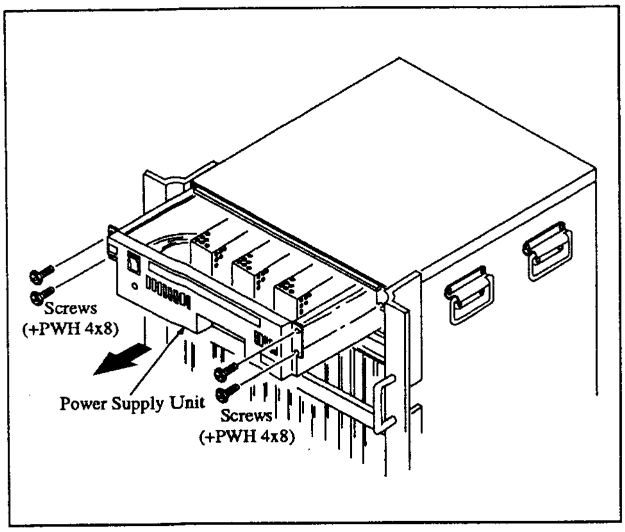
<Note> See the following drawing for details of the harness connection.

(View from the front side)

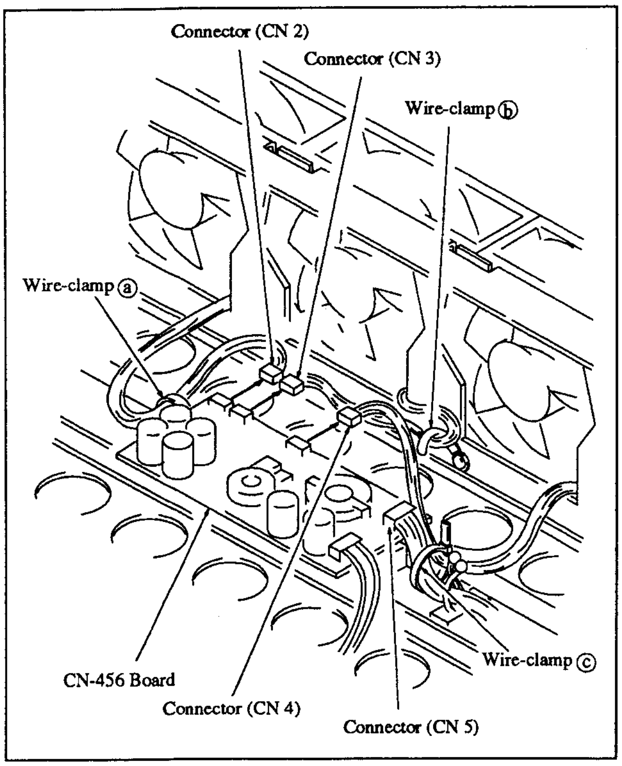

(BLK)
(RED)
(BLK)
(RED)
(BLK)
(RED)
(BLK)
(RED)
(RED)
(RED)
(BLU)
(BLK)
(BLK)
(BLU)
(BLK)
(BLK)
(BRN)
(WHT)
(BRN)
(BRN)
(WHT)
(WHT)
+S
+V
-V
-S
FG
L
N
SWITCHING REGULATOR

4-3. REPLACEMENT OF THE DC FAN

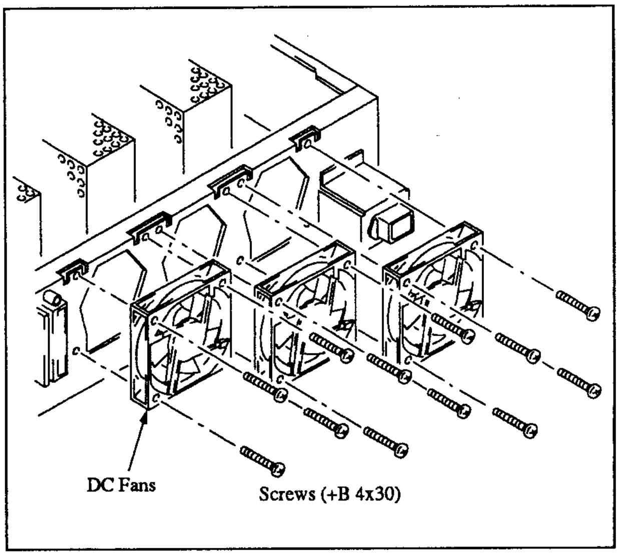
(1) Remove the front panel by the same procedure as that of 3-2.
(2) Remove the 4 set screws (+PWH 4x8) and pull the power supply unit towards the front.


Screws
(+PWH 4x8)
Power Supply Unit
Screws
(+PWH 4x8)

(3) Remove the harness from the 2 wire-clamps ⓐ and ⓑ.
(4) Cut off the wire-clamp ⓒ that connects connector (CN4) and connector (CN5).
(5) Remove the 3 connectors (CN2, CN3, and CN4) on the CN-456 board.


Connector (CN 2)
Connector (CN 3)
Wire-clamp ⓑ
Wire-clamp ⓐ
Wire-clamp ⓒ
CN-456 Board
Connector (CN 4)
Connector (CN 5)

(6) Remove the 4 set screws (+B 4x30) of the DC fans, and then remove the fans.


DC Fans
Screws (+B 4x30)

(7) Install new DC fans in the reverse sequence of procedures (1) through (6).

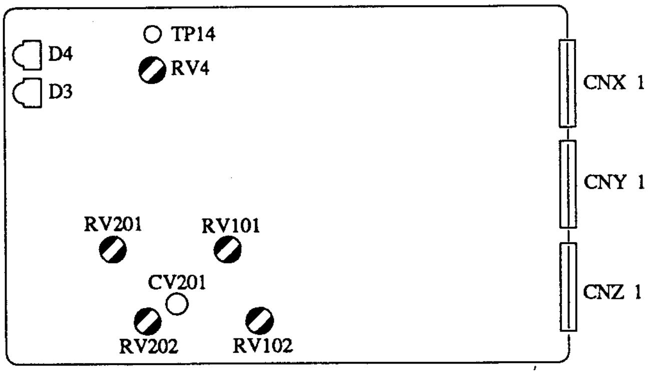
<Note>

(1) Fasten the harnesses of CN4 and CN5 with a wire-clamp that is equivalent to the wire-clamp ⓒ that was cut off in (4) so that the harness of the fan motor does not touch the fan blade.
(2) Apply "screw-lock" to the head of the set screws (+B 4x30) of the fan after new DC fans are installed (to prevent the loosening of screws).

SECTION 6
ELECTRICAL ALIGNMENT

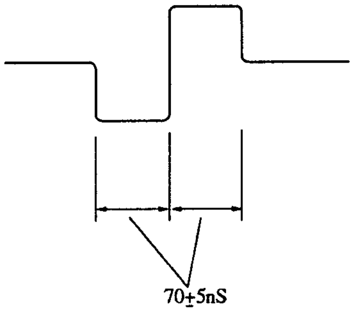
6-1. SG-153 BOARD

RV4	REF CF
RV101	REF OUTPUT GAIN
RV102	REF OUTPUT OFFSET
RV201	MONITOR OUTPUT GAIN
RV202	MONITOR OUTPUT OFFSET
CV201	MONITOR OUTPUT FREQUENCY RESPONSE

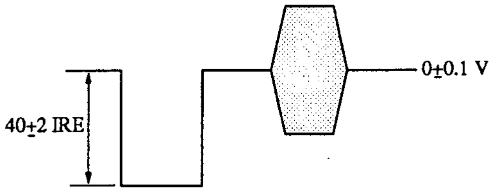


(Component Side)

6-1-1. CF (Color Frame) Adjustment

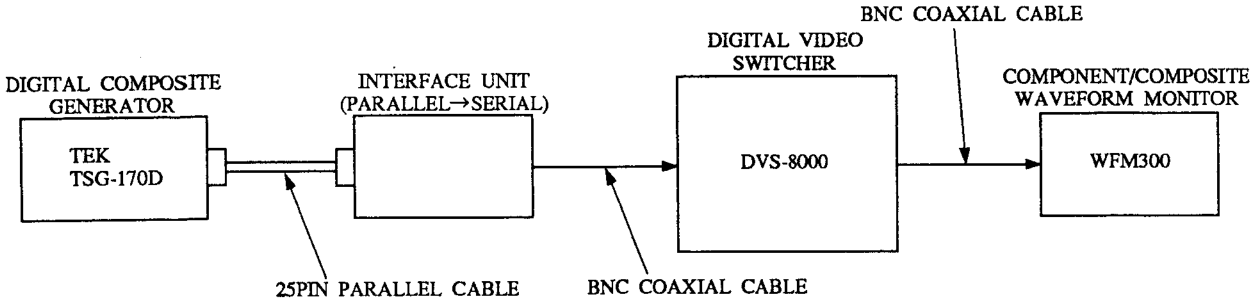
Conditions of adjustment	Specifications	Adjustment
• Enter a black burst signal into the REF INPUT terminal of the rear panel. • Confirm that D3 (CF IN indicator) is turned on.	TP14 	⊘ RV4

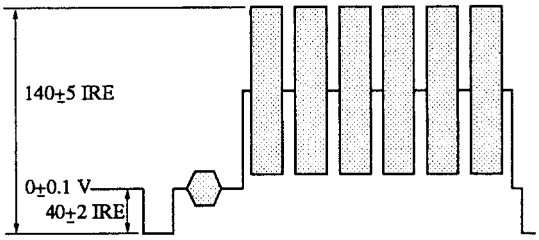
6-1-2. SYNC/Pedestal Level Adjustment (REF OUTPUT)

Conditions of adjustment	Specifications	Adjustment
• Enter a black burst signal into the REF INPUT terminal of the rear panel.	REF OUTPUT terminal 	Sync level adjustment ⊘ RV101 Pedestal level adjustment ⊘ RV102

6-1-3. SYNC/Pedestal Level Adjustment (MONITOR OUTPUT)

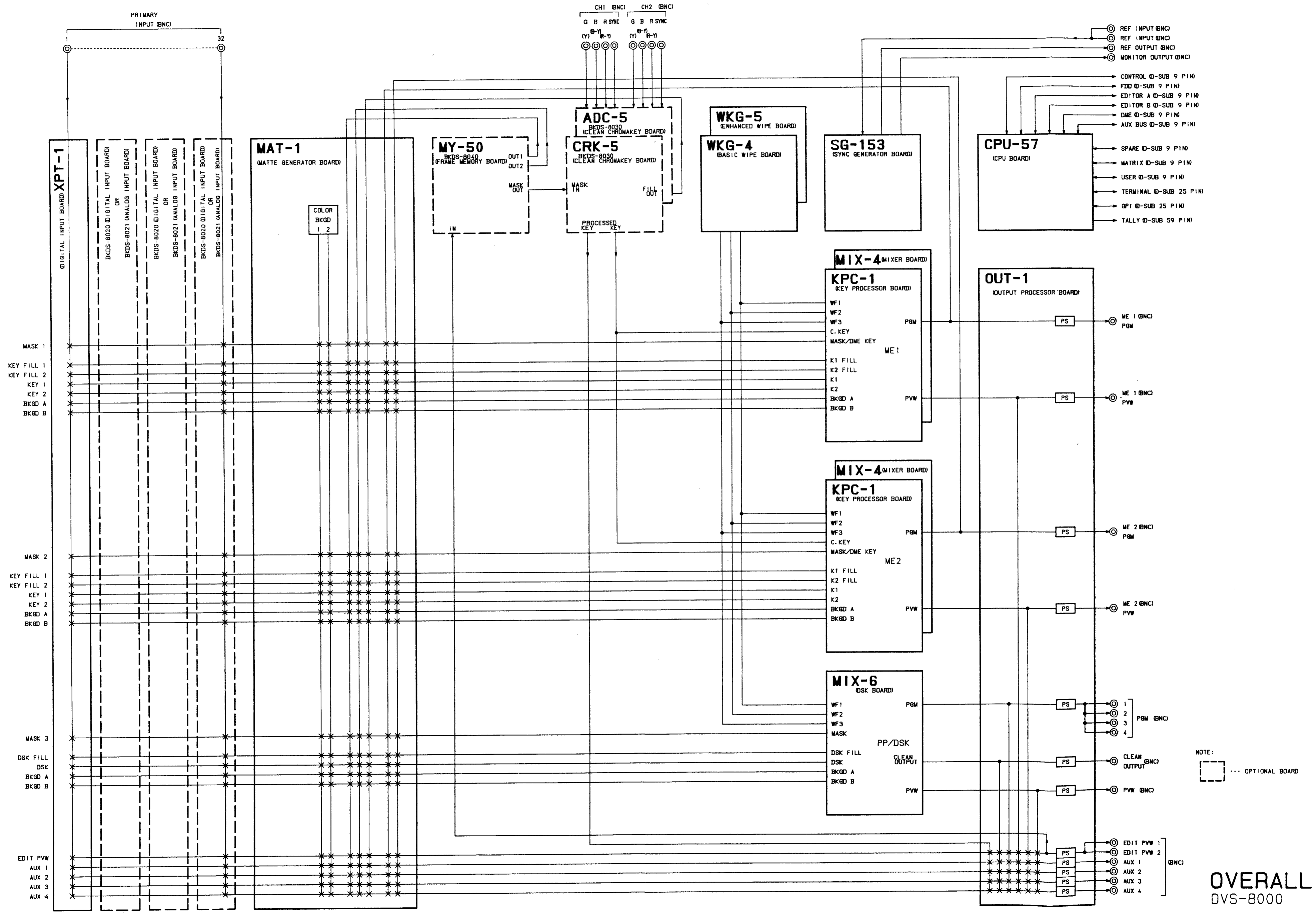
<Connection>


BNC COAXIAL CABLE
DIGITAL VIDEO SWITCHER
DIGITAL COMPOSITE GENERATOR
INTERFACE UNIT (PARALLEL→SERIAL)
COMPONENT/COMPOSITE WAVEFORM MONITOR
TEK TSG-170D
DVS-8000
WFM300
25PIN PARALLEL CABLE
BNC COAXIAL CABLE

Conditions of adjustment	Specifications	Adjustment
• Enter a 100% multiburst signal into the PRIMARY INPUT terminal of the rear panel. • Select MULTIBURST for PVW BUS on the control panel BKDS-8010.	MONITOR OUTPUT terminal  140±5 IRE 0±0.1 V 40±2 IRE * Frequency characteristics: 0 to 5.5 MHz±0.5 dB	Sync level adjustment ⊘ RV201 Pedestal level adjustment ⊘ RV202 Adjustment of frequency characteristics ⊘ CV201

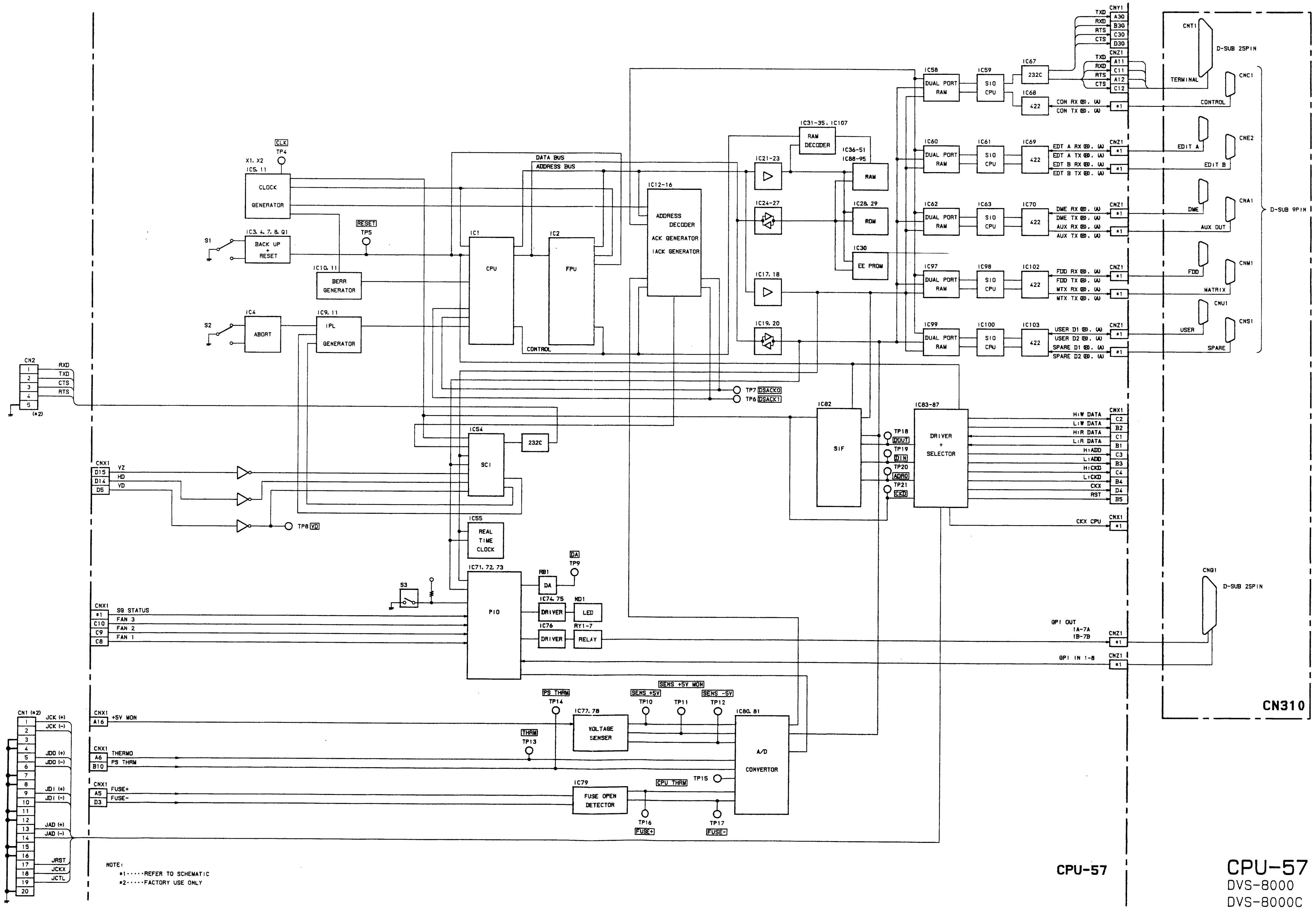
SECTION 7
BLOCK DIAGRAMS

OVERALL


PRIMARY INPUT (BNC)
1
32
XPT-1
(DIGITAL INPUT BOARD)
BKDS-8020 (DIGITAL INPUT BOARD) OR BKDS-8021 (ANALOG INPUT BOARD)
BKDS-8020 (DIGITAL INPUT BOARD) OR BKDS-8021 (ANALOG INPUT BOARD)
BKDS-8020 (DIGITAL INPUT BOARD) OR BKDS-8021 (ANALOG INPUT BOARD)
MASK 1
KEY FILL 1
KEY FILL 2
KEY 1
KEY 2
BKGD A
BKGD B
MASK 2
KEY FILL 1
KEY FILL 2
KEY 1
KEY 2
BKGD A
BKGD B
MASK 3
DSK FILL
DSK
BKGD A
BKGD B
EDIT PVW
AUX 1
AUX 2
AUX 3
AUX 4
MAT-1
(MATTE GENERATOR BOARD)
COLOR BKGD
1 2
MY-50
BKDS-8040
(FRAME MEMORY BOARD)
OUT1
OUT2
MASK OUT
IN
CH1 (BNC)
CH2 (BNC)
G B R SYNC
(Y) (B-Y) (R-Y)
G B R SYNC
(Y) (B-Y) (R-Y)
ADC-5
BKDS-8030
(CLEAN CHROMAKEY BOARD)
CRK-5
BKDS-8030
(CLEAN CHROMAKEY BOARD)
MASK IN
FILL OUT
PROCESSED KEY
KEY
WKG-5
(ENHANCED WIPE BOARD)
WKG-4
(BASIC WIPE BOARD)
SG-153
(SYNC GENERATOR BOARD)
CPU-57
(CPU BOARD)
REF INPUT (BNC)
REF INPUT (BNC)
REF OUTPUT (BNC)
MONITOR OUTPUT (BNC)
CONTROL (D-SUB 9 PIN)
FDD (D-SUB 9 PIN)
EDITOR A (D-SUB 9 PIN)
EDITOR B (D-SUB 9 PIN)
DME (D-SUB 9 PIN)
AUX BUS (D-SUB 9 PIN)
SPARE (D-SUB 9 PIN)
MATRIX (D-SUB 9 PIN)
USER (D-SUB 9 PIN)
TERMINAL (D-SUB 25 PIN)
GPI (D-SUB 25 PIN)
TALLY (D-SUB 59 PIN)
MIX-4 (MIXER BOARD)
KPC-1
(KEY PROCESSOR BOARD)
WF1
WF2
WF3
C.KEY
MASK/DME KEY
ME1
K1 FILL
K2 FILL
K1
K2
BKGD A
BKGD B
PGM
PVW
MIX-4 (MIXER BOARD)
KPC-1
(KEY PROCESSOR BOARD)
WF1
WF2
WF3
C.KEY
MASK/DME KEY
ME2
K1 FILL
K2 FILL
K1
K2
BKGD A
BKGD B
PGM
PVW
MIX-6
(DSK BOARD)
WF1
WF2
WF3
MASK
PP/DSK
DSK FILL
DSK
BKGD A
BKGD B
PGM
CLEAN OUTPUT
PVW
OUT-1
(OUTPUT PROCESSOR BOARD)
PS
ME 1 (BNC) PGM
ME 1 (BNC) PVW
ME 2 (BNC) PGM
ME 2 (BNC) PVW
1
2
3
4
PGM (BNC)
CLEAN OUTPUT (BNC)
PVW (BNC)
EDIT PVW 1
EDIT PVW 2
AUX 1
AUX 2
AUX 3
AUX 4
(BNC)
NOTE:
··· OPTIONAL BOARD

OVERALL
DVS-8000

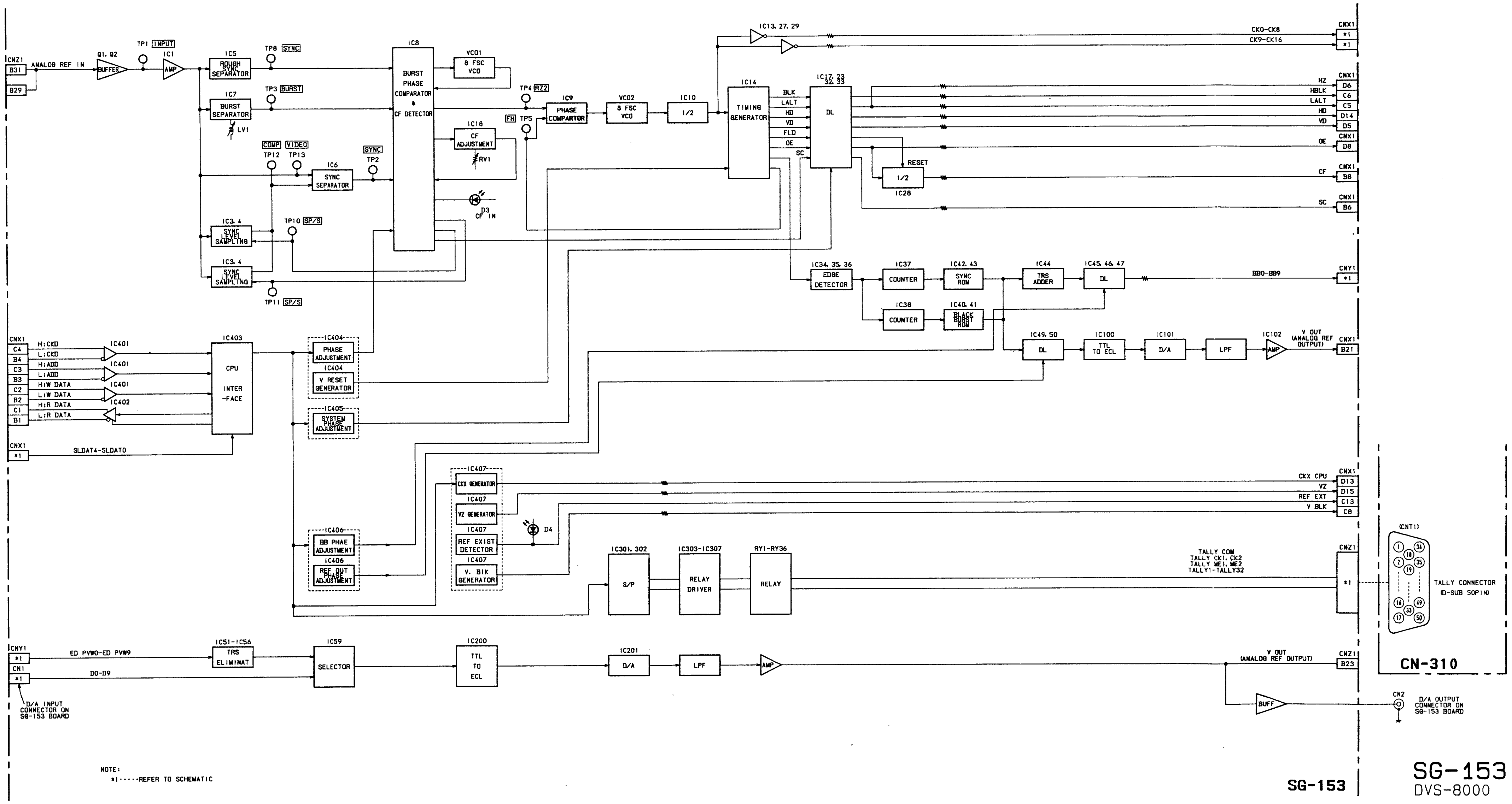
CPU BOARD


CLK
TP4
X1, X2
IC5, 11
CLOCK GENERATOR
RESET
TP5
S1
IC3, 4, 7, & Q1
BACK UP + RESET
IC10, 11
BERR GENERATOR
S2
IC4
ABORT
IC9, 11
IPL GENERATOR
DATA BUS
ADDRESS BUS
IC1
CPU
IC2
FPU
CONTROL
IC12-16
ADDRESS DECODER
ACK GENERATOR
IACK GENERATOR
IC31-35, IC107
RAM DECODER
IC36-51
IC88-95
RAM
IC21-23
IC24-27
IC28, 29
ROM
IC30
EE PROM
IC17, 18
IC19, 20
IC58
DUAL PORT RAM
IC59
SIO CPU
IC67
232C
IC68
422
IC60
DUAL PORT RAM
IC61
SIO CPU
IC69
422
IC62
DUAL PORT RAM
IC63
SIO CPU
IC70
422
IC97
DUAL PORT RAM
IC98
SIO CPU
IC102
422
IC99
DUAL PORT RAM
IC100
SIO CPU
IC103
422
TXD
RXD
RTS
CTS
CNY1
A30
B30
C30
D30
CNZ1
A11
C11
A12
C12
CON RX (B), (A)
CON TX (B), (A)
EDT A RX (B), (A)
EDT A TX (B), (A)
EDT B RX (B), (A)
EDT B TX (B), (A)
DME RX (B), (A)
DME TX (B), (A)
AUX RX (B), (A)
AUX TX (B), (A)
FDD RX (B), (A)
FDD TX (B), (A)
MTX RX (B), (A)
MTX TX (B), (A)
USER D1 (B), (A)
USER D2 (B), (A)
SPARE D1 (B), (A)
SPARE D2 (B), (A)
*1
CNT1
D-SUB 25PIN
TERMINAL
CNC1
CONTROL
EDIT A
CNE2
EDIT B
DME
CNA1
D-SUB 9PIN
AUX OUT
FDD
CNM1
MATRIX
CNU1
USER
CNS1
SPARE
CN2
RXD
TXD
CTS
RTS
(*2)
TP7 DSACK0
TP6 DSACK1
IC82
SIF
TP18 DOUT
TP19 DIN
TP20 ADRO
TP21 CKO
IC83-87
DRIVER + SELECTOR
CNX1
H:W DATA
L:W DATA
H:R DATA
L:R DATA
H:ADD
L:ADD
H:CKO
L:CKO
CKX
RST
C2
B2
C1
B1
C3
B3
C4
B4
D4
B5
CKX CPU
IC54
SCI
232C
D15
D14
D5
VZ
HD
VD
TP8 VD
IC55
REAL TIME CLOCK
DA
TP9
IC71, 72, 73
PIO
RB1
DA
IC74, 75
DRIVER
ND1
LED
IC76
DRIVER
RY1-7
RELAY
S3
SB STATUS
FAN 3
FAN 2
FAN 1
C10
C9
C8
CN01
D-SUB 25PIN
GPI OUT
1A-7A
1B-7B
GPI IN 1-8
CN310
CN1 (*2)
JCK (+)
JCK (-)
JDO (+)
JDO (-)
JDI (+)
JDI (-)
JAD (+)
JAD (-)
JRST
JCKX
JCTL
+5V MON
A16
THERMO
PS THRM
A6
B10
FUSE+
FUSE-
A5
D3
PS THRM
TP14
THRM
TP13
IC77, 78
VOLTAGE SENSER
SENS +5V MON
SENS +5V
TP10
TP11
SENS -5V
TP12
IC80, 81
A/D CONVERTOR
IC79
FUSE OPEN DETECTOR
CPU THRM
TP15
TP16
FUSE+
TP17
FUSE-
CPU-57

NOTE:
*1······REFER TO SCHEMATIC
*2······FACTORY USE ONLY

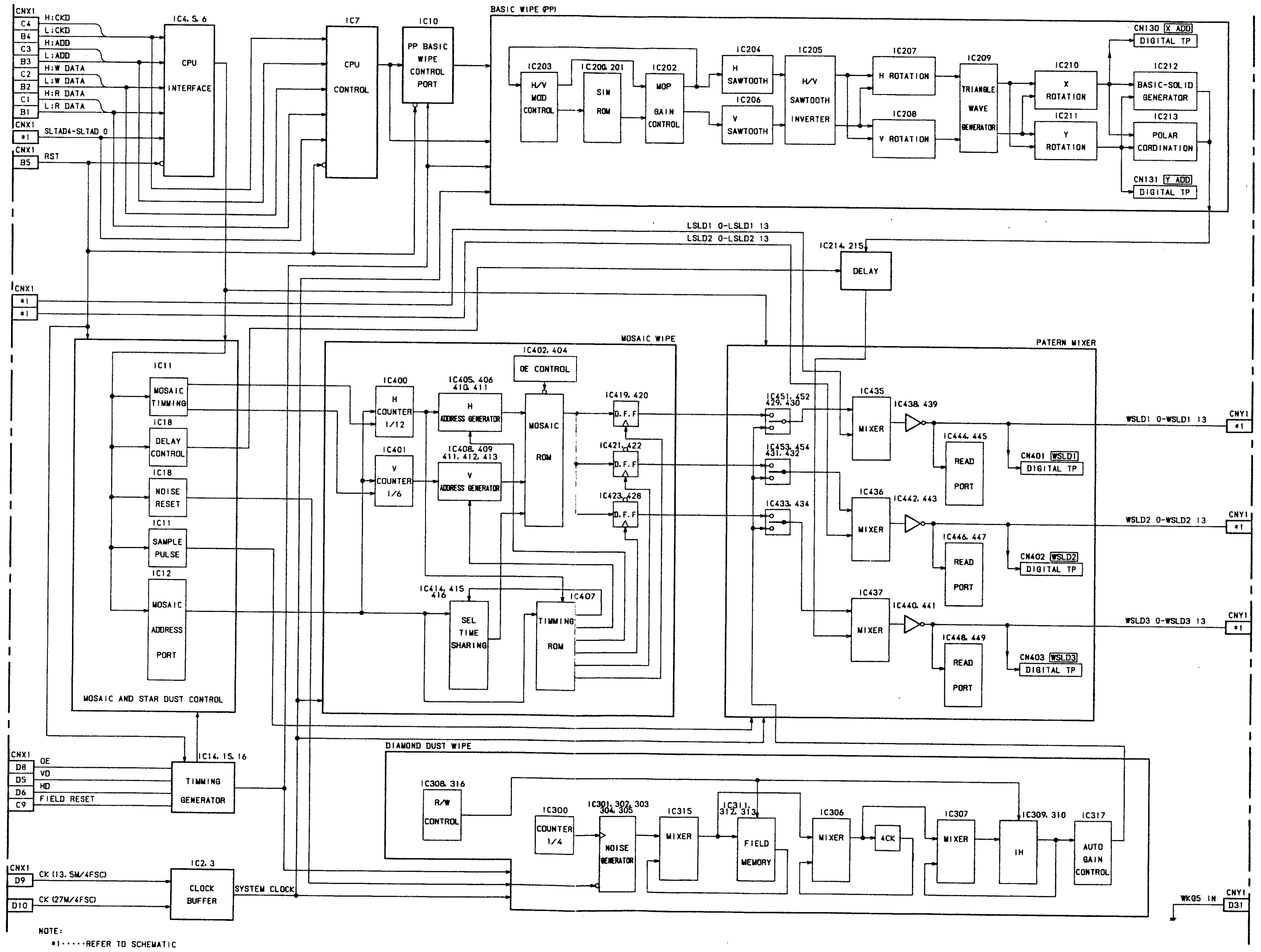
CPU-57
DVS-8000
DVS-8000C

SYNC GENERATOR BOARD


CNZ1
B31
B29
ANALOG REF IN
Q1, Q2
BUFFER
TP1 INPUT
IC1
AMP
IC5
ROUGH SYNC SEPARATOR
TP8 SYNC
IC7
BURST SEPARATOR
LV1
TP3 BURST
COMP VIDEO
TP12 TP13
IC6
SYNC SEPARATOR
SYNC
TP2
IC3, 4
SYNC LEVEL SAMPLING
TP10 SP/S
IC3, 4
SYNC LEVEL SAMPLING
TP11 SP/S
IC8
BURST PHASE COMPARATOR & CF DETECTOR
VCO1
8 FSC VCO
IC18
CF ADJUSTMENT
RV1
D3
CF IN
TP4 RZ2
FH TP5
IC9
PHASE COMPARTOR
VCO2
8 FSC VCO
IC10
1/2
IC13, 27, 29
CK0-CK8
CK9-CK16
CNX1
*1
*1
IC14
TIMING GENERATOR
BLK
LALT
HD
VD
FLD
OE
SC
IC17, 23 32, 33
DL
RESET
1/2
IC28
HZ
HBLK
LALT
HD
VD
CNX1
D6
C6
C5
D14
D5
OE
CNX1
D8
CF
CNX1
B8
SC
CNX1
B6
IC34, 35, 36
EDGE DETECTOR
IC37
COUNTER
IC42, 43
SYNC ROM
IC44
TRS ADDER
IC45, 46, 47
DL
BB0-BB9
CNY1
*1
IC38
COUNTER
IC40, 41
BLACK BURST ROM
IC49, 50
DL
IC100
TTL TO ECL
IC101
D/A
LPF
IC102
AMP
V OUT (ANALOG REF OUTPUT)
CNX1
B21
CNX1
C4
B4
C3
B3
C2
B2
C1
B1
H:CKD
L:CKD
H:ADD
L:ADD
H:W DATA
L:W DATA
H:R DATA
L:R DATA
IC401
IC401
IC401
IC402
IC403
CPU INTER-FACE
CNX1
*1
SLDAT4-SLDAT0
IC404
PHASE ADJUSTMENT
IC404
V RESET GENERATOR
IC405
SYSTEM PHASE ADJUSTMENT
IC406
BB PHAE ADJUSTMENT
IC406
REF OUT PHASE ADJUSTMENT
IC407
CKX GENERATOR
IC407
VZ GENERATOR
IC407
REF EXIST DETECTOR
IC407
V. BIK GENERATOR
D4
CKX CPU
VZ
REF EXT
V BLK
CNX1
D13
D15
C13
C8
IC301, 302
S/P
IC303-IC307
RELAY DRIVER
RY1-RY36
RELAY
TALLY COM
TALLY CK1, CK2
TALLY ME1, ME2
TALLY1-TALLY32
CNZ1
*1
(CNT1)
1
34
18
2
35
19
16
49
33
17
50
TALLY CONNECTOR
(D-SUB 50PIN)
CN-310
CNY1
*1
CN1
*1
ED PVW0-ED PVW9
D0-D9
D/A INPUT CONNECTOR ON SG-153 BOARD
IC51-IC56
TRS ELIMINAT
IC59
SELECTOR
IC200
TTL TO ECL
IC201
D/A
LPF
AMP
V OUT (ANALOG REF OUTPUT)
CNZ1
B23
BUFF
CN2
D/A OUTPUT CONNECTOR ON SG-153 BOARD
SG-153
SG-153
DVS-8000

NOTE:
*1……REFER TO SCHEMATIC

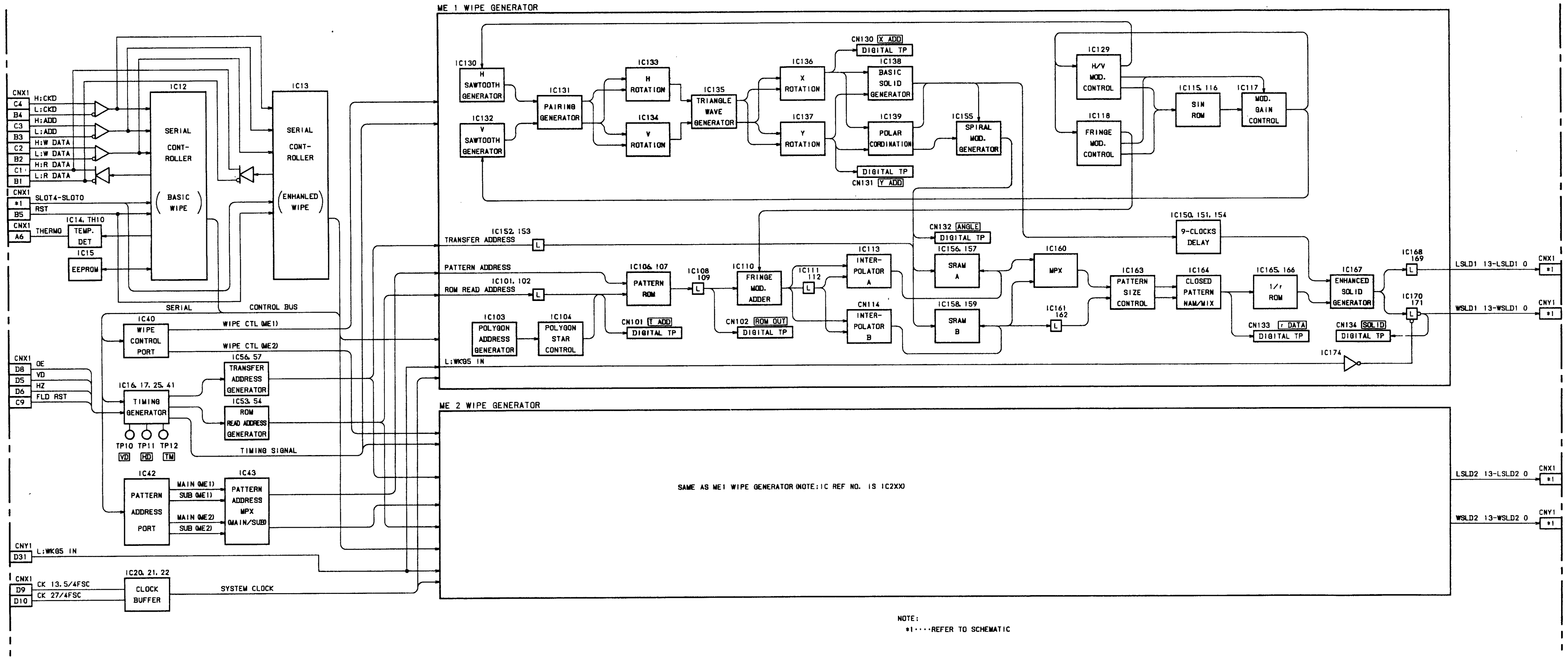
ENHANCED WIPE BOARD


CNX1
C4
B4
C3
B3
C2
B2
C1
B1
H:CKD
L:CKD
H:ADD
L:ADD
H:W DATA
L:W DATA
H:R DATA
L:R DATA
CNX1
*1
SLTAD4-SLTAD 0
CNX1
B5
RST
IC4. 5. 6
CPU
INTERFACE
IC7
CPU
CONTROL
IC10
PP BASIC
WIPE
CONTROL
PORT
BASIC WIPE (PP)
IC203
H/V
MOD
CONTROL
IC200. 201
SIN
ROM
IC202
MOP
GAIN
CONTROL
IC204
H
SAWTOOTH
IC206
V
SAWTOOTH
IC205
H/V
SAWTOOTH
INVERTER
IC207
H ROTATION
IC208
V ROTATION
IC209
TRIANGLE
WAVE
GENERATOR
IC210
X
ROTATION
IC211
Y
ROTATION
CN130 X ADD
DIGITAL TP
IC212
BASIC-SOLID
GENERATOR
IC213
POLAR
CORDINATION
CN131 Y ADD
DIGITAL TP
LSLD1 0-LSLD1 13
LSLD2 0-LSLD2 13
IC214. 215
DELAY
CNX1
*1
*1
IC11
MOSAIC
TIMMING
IC18
DELAY
CONTROL
IC18
NOISE
RESET
IC11
SAMPLE
PULSE
IC12
MOSAIC
ADDRESS
PORT
MOSAIC AND STAR DUST CONTROL
MOSAIC WIPE
IC402. 404
OE CONTROL
IC400
H
COUNTER
1/12
IC405. 406
410. 411
H
ADDRESS GENERATOR
IC401
V
COUNTER
1/6
IC408. 409
411. 412. 413
V
ADDRESS GENERATOR
MOSAIC
ROM
IC419. 420
D.F.F
IC421. 422
D.F.F
IC423. 428
D.F.F
IC414. 415
416
SEL
TIME
SHARING
IC407
TIMMING
ROM
PATERN MIXER
IC451. 452
429. 430
IC453. 454
431. 432
IC433. 434
IC435
MIXER
IC438. 439
IC444. 445
READ
PORT
CN401 WSLD1
DIGITAL TP
IC436
MIXER
IC442. 443
IC446. 447
READ
PORT
CN402 WSLD2
DIGITAL TP
IC437
MIXER
IC440. 441
IC448. 449
READ
PORT
CN403 WSLD3
DIGITAL TP
WSLD1 0-WSLD1 13
CNY1
*1
WSLD2 0-WSLD2 13
CNY1
*1
WSLD3 0-WSLD3 13
CNY1
*1
CNX1
D8
D5
D6
C9
OE
VD
HD
FIELD RESET
IC14. 15. 16
TIMMING
GENERATOR
DIAMOND DUST WIPE
IC308. 316
R/W
CONTROL
IC300
COUNTER
1/4
IC301. 302. 303
304. 305
NOISE
GENERATOR
IC315
MIXER
IC311.
312. 313
FIELD
MEMORY
IC306
MIXER
4CK
IC307
MIXER
IC309. 310
IH
IC317
AUTO
GAIN
CONTROL
CNX1
D9
D10
CK (13.5M/4FSC)
CK (27M/4FSC)
IC2. 3
CLOCK
BUFFER
SYSTEM CLOCK
WKG5 IN
CNY1
D31

NOTE:
*1·····REFER TO SCHEMATIC

WKG-5
DVS-8000
DVS-8000C

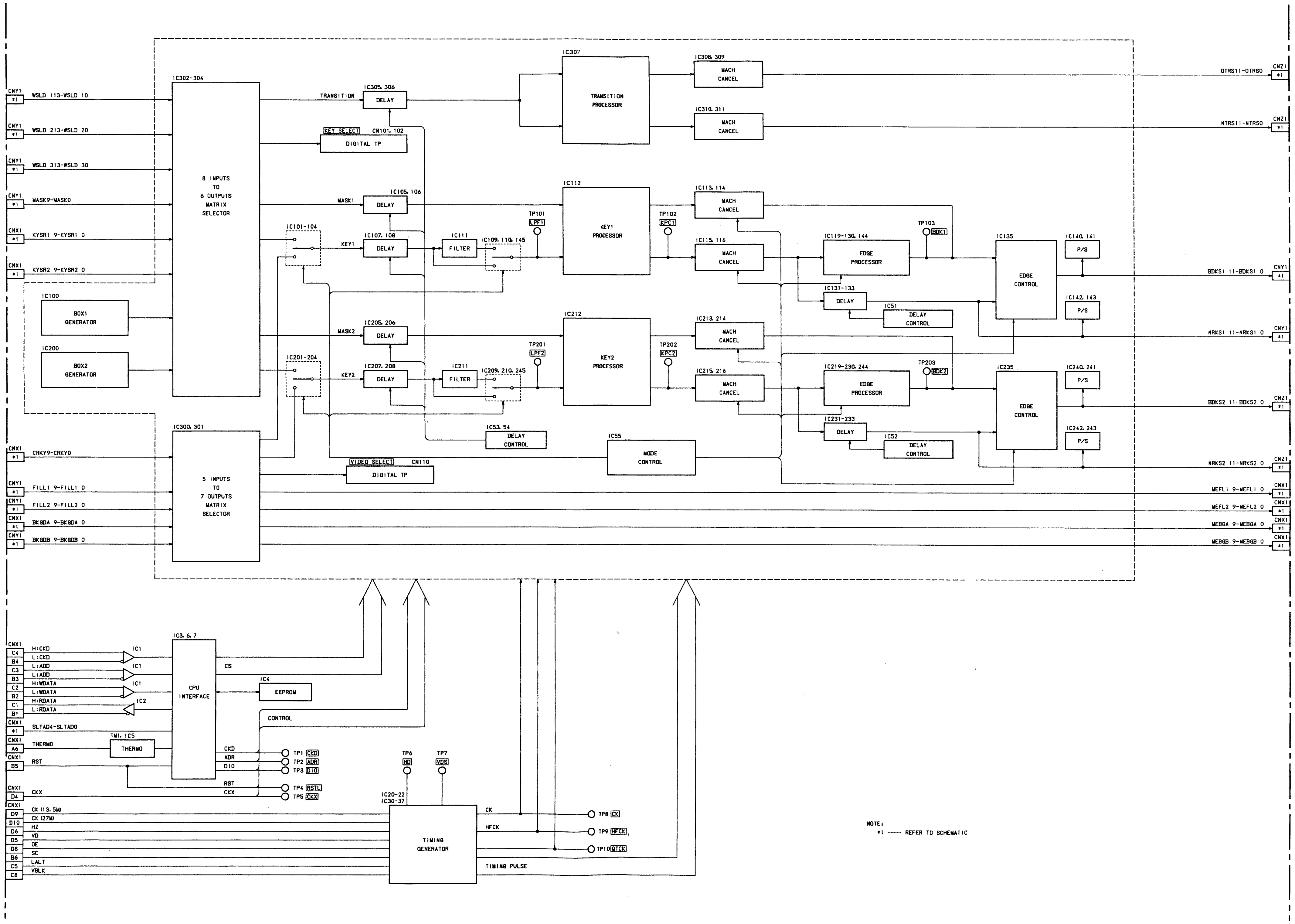
BASIC WIPE BOARD


CNX1
C4 H:CKD
B4 L:CKD
C3 H:ADD
B3 L:ADD
C2 H:W DATA
B2 L:W DATA
C1 H:R DATA
B1 L:R DATA
CNX1
*1 SLOT4-SLOT0
B5 RST
CNX1
A6 THERMO
IC14, TH10
TEMP. DET
IC15
EEPROM
IC12
SERIAL CONT-ROLLER
(BASIC WIPE)
IC13
SERIAL CONT-ROLLER
(ENHANLED WIPE)
SERIAL
CONTROL BUS
IC40
WIPE CONTROL PORT
WIPE CTL (ME1)
WIPE CTL (ME2)
CNX1
D8 OE
D5 VD
D6 HZ
C9 FLD RST
IC16, 17, 25, 41
TIMING GENERATOR
TP10 TP11 TP12
VD HD TM
IC56, 57
TRANSFER ADDRESS GENERATOR
IC53, 54
ROM READ ADDRESS GENERATOR
TIMING SIGNAL
IC42
PATTERN ADDRESS PORT
MAIN (ME1)
SUB (ME1)
MAIN (ME2)
SUB (ME2)
IC43
PATTERN ADDRESS MPX (MAIN/SUB)
CNY1
D31 L:WKG5 IN
CNX1
D9 CK 13.5/4FSC
D10 CK 27/4FSC
IC20, 21, 22
CLOCK BUFFER
SYSTEM CLOCK
ME 1 WIPE GENERATOR
IC130
H SAWTOOTH GENERATOR
IC132
V SAWTOOTH GENERATOR
IC131
PAIRING GENERATOR
IC133
H ROTATION
IC134
V ROTATION
IC135
TRIANGLE WAVE GENERATOR
IC136
X ROTATION
IC137
Y ROTATION
CN130 X ADD
DIGITAL TP
IC138
BASIC SOLID GENERATOR
IC139
POLAR CORDINATION
DIGITAL TP
CN131 Y ADD
IC155
SPIRAL MOD. GENERATOR
IC129
H/V MOD. CONTROL
IC118
FRINGE MOD. CONTROL
IC115, 116
SIN ROM
IC117
MOD. GAIN CONTROL
TRANSFER ADDRESS
IC152, 153
L
PATTERN ADDRESS
ROM READ ADDRESS
IC101, 102
L
IC103
POLYGON ADDRESS GENERATOR
IC104
POLYGON STAR CONTROL
IC106, 107
PATTERN ROM
CN101 T ADD
DIGITAL TP
IC108 109
L
IC110
FRINGE MOD. ADDER
CN102 ROM OUT
DIGITAL TP
IC111 112
L
IC113
INTER-POLATOR A
CN114
INTER-POLATOR B
CN132 ANGLE
DIGITAL TP
IC156, 157
SRAM A
IC158, 159
SRAM B
IC160
MPX
IC161 162
L
IC150, 151, 154
9-CLOCKS DELAY
IC163
PATTERN SIZE CONTROL
IC164
CLOSED PATTERN NAM/MIX
IC165, 166
1/r ROM
CN133 r DATA
DIGITAL TP
IC167
ENHANCED SOLID GENERATOR
CN134 SOLID
DIGITAL TP
IC168 169
L
IC170 171
L
IC174
L:WKG5 IN
LSLD1 13-LSLD1 0
CNX1
*1
WSLD1 13-WSLD1 0
CNY1
*1
ME 2 WIPE GENERATOR
SAME AS ME1 WIPE GENERATOR (NOTE: IC REF NO. IS IC2XX)
LSLD2 13-LSLD2 0
CNX1
*1
WSLD2 13-WSLD2 0
CNY1
*1

NOTE:
*1····REFER TO SCHEMATIC

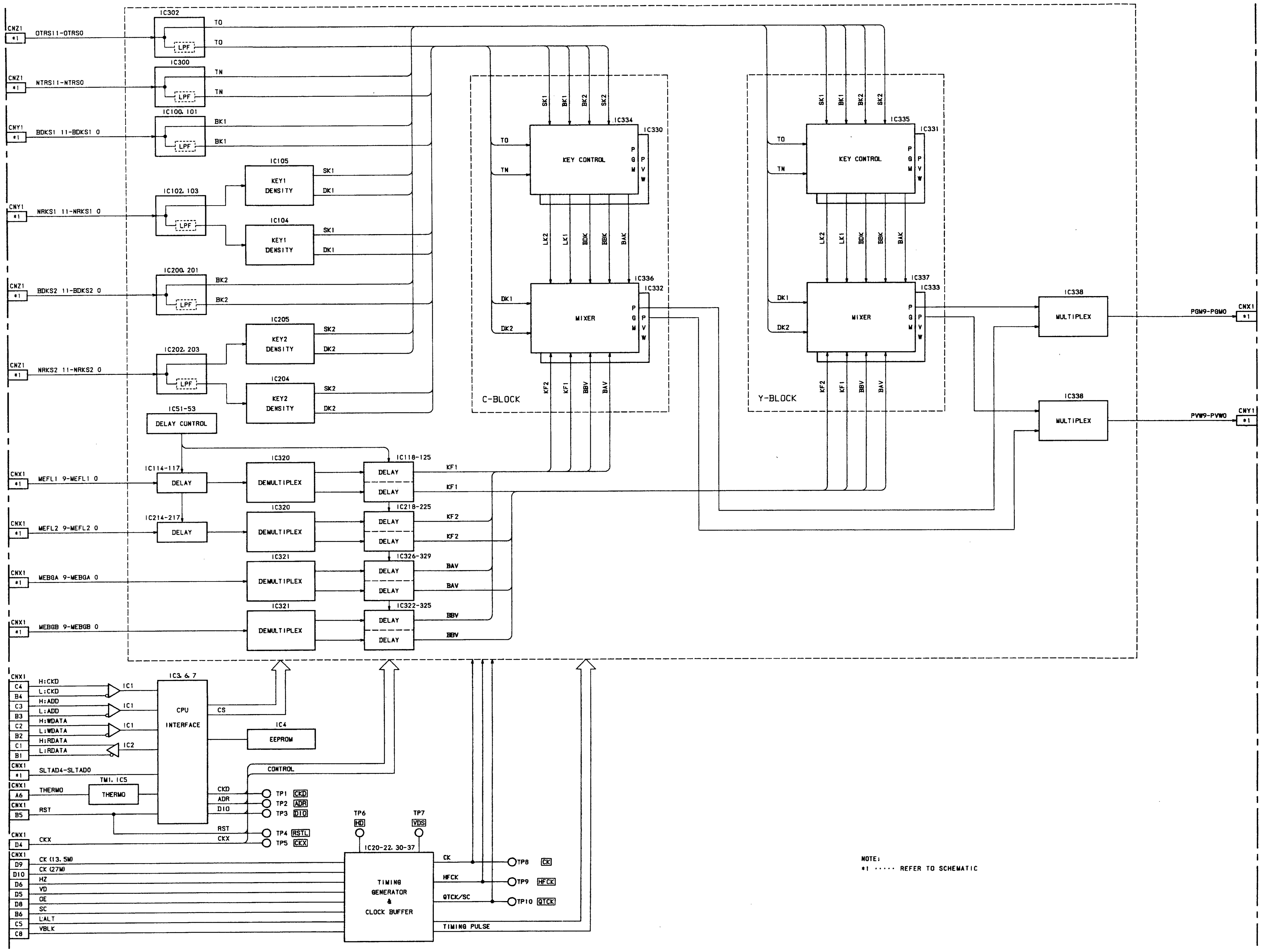
WKG-4
DVS-8000
DVS-8000C

KEY PROCESSOR BOARD


CNY1
WSLD 113-WSLD 10
WSLD 213-WSLD 20
WSLD 313-WSLD 30
MASK9-MASK0
CNX1
KYSR1 9-KYSR1 0
KYSR2 9-KYSR2 0
IC100
BOX1 GENERATOR
IC200
BOX2 GENERATOR
IC302-304
8 INPUTS TO 6 OUTPUTS MATRIX SELECTOR
TRANSITION
IC305, 306
DELAY
KEY SELECT
CN101, 102
DIGITAL TP
MASK1
IC105, 106
IC101-104
KEY1
IC107, 108
IC111
FILTER
IC109, 110, 145
TP101
LPF1
IC307
TRANSITION PROCESSOR
IC308, 309
MACH CANCEL
IC310, 311
IC112
KEY1 PROCESSOR
TP102
KPC1
IC113, 114
IC115, 116
TP103
BDK1
IC119-130, 144
EDGE PROCESSOR
IC131-133
DELAY
IC51
DELAY CONTROL
IC135
EDGE CONTROL
IC140, 141
P/S
IC142, 143
MASK2
IC205, 206
IC201-204
KEY2
IC207, 208
IC211
IC209, 210, 245
TP201
LPF2
IC212
KEY2 PROCESSOR
TP202
KPC2
IC213, 214
IC215, 216
TP203
BDK2
IC219-230, 244
IC231-233
IC52
IC235
IC240, 241
IC242, 243
IC53, 54
DELAY CONTROL
IC55
MODE CONTROL
IC300, 301
5 INPUTS TO 7 OUTPUTS MATRIX SELECTOR
CRKY9-CRKY0
VIDEO SELECT
CN110
FILL1 9-FILL1 0
FILL2 9-FILL2 0
BKGDA 9-BKGDA 0
BKGDB 9-BKGDB 0
OTRS11-OTRS0
NTRS11-NTRS0
BDKS1 11-BDKS1 0
NRKS1 11-NRKS1 0
BDKS2 11-BDKS2 0
NRKS2 11-NRKS2 0
MEFL1 9-MEFL1 0
MEFL2 9-MEFL2 0
MEBGA 9-MEBGA 0
MEBGB 9-MEBGB 0
CNZ1
*1
C4 B4 C3 B3 C2 B2 C1 B1
H:CKD
L:CKD
L:ADD
L:ADD
H:WDATA
L:WDATA
H:RDATA
L:RDATA
IC1
IC2
IC3, & 7
CPU INTERFACE
CS
IC4
EEPROM
CONTROL
SLTAD4-SLTAD0
THERMO
TM1, IC5
A6
RST
B5
CKD
ADR
DIO
TP1 CKD
TP2 ADR
TP3 DIO
TP4 RSTL
TP5 CKX
CKX
D4
CK (13.5M)
CK (27M)
HZ
VD
OE
SC
LALT
VBLK
D9 D10 D6 D5 D8 B6 C5 C8
TP6
HD
TP7
VDS
IC20-22
IC30-37
TIMING GENERATOR
CK
HFCK
TIMING PULSE
TP8 CK
TP9 HFCK
TP10 QTCK
NOTE:
*1 ----- REFER TO SCHEMATIC

KPC-1
DVS-8000
DVS-8000C

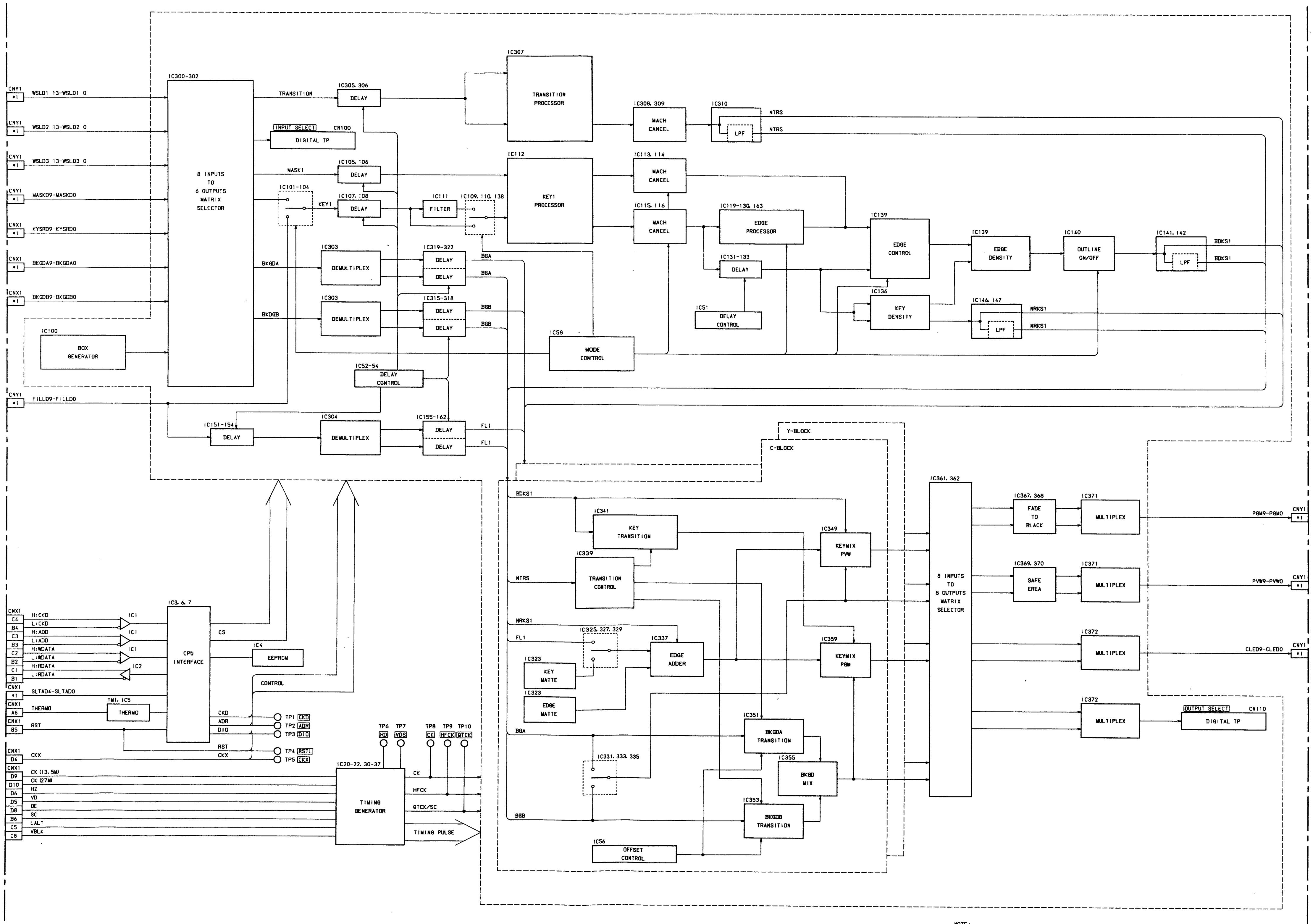
MIXER BOARD


CNZ1
*1
OTRS11-OTRS0
IC302
LPF
TO
TO
CNZ1
*1
NTRS11-NTRS0
IC300
LPF
TN
TN
CNY1
*1
BDKS1 11-BDKS1 0
IC100, 101
LPF
BK1
BK1
IC105
KEY1 DENSITY
SK1
DK1
CNY1
*1
NRKS1 11-NRKS1 0
IC102, 103
LPF
IC104
KEY1 DENSITY
SK1
DK1
CNZ1
*1
BDKS2 11-BDKS2 0
IC200, 201
LPF
BK2
BK2
IC205
KEY2 DENSITY
SK2
DK2
CNZ1
*1
NRKS2 11-NRKS2 0
IC202, 203
LPF
IC204
KEY2 DENSITY
SK2
DK2
IC51-53
DELAY CONTROL
CNX1
*1
MEFL1 9-MEFL1 0
IC114-117
DELAY
IC320
DEMULTIPLEX
IC118-125
DELAY
DELAY
KF1
KF1
CNX1
*1
MEFL2 9-MEFL2 0
IC214-217
DELAY
IC320
DEMULTIPLEX
IC218-225
DELAY
DELAY
KF2
KF2
CNX1
*1
MEBGA 9-MEBGA 0
IC321
DEMULTIPLEX
IC326-329
DELAY
DELAY
BAV
BAV
CNX1
*1
MEBGB 9-MEBGB 0
IC321
DEMULTIPLEX
IC322-325
DELAY
DELAY
BBV
BBV
C-BLOCK
SK1
BK1
BK2
SK2
IC334
IC330
TO
TN
KEY CONTROL
PGM
PVW
LK2
LK1
BDK
BBK
BAK
IC336
IC332
DK1
DK2
MIXER
PGM
PVW
KF2
KF1
BBV
BAV
Y-BLOCK
SK1
BK1
BK2
SK2
IC335
IC331
TO
TN
KEY CONTROL
PGM
PVW
LK2
LK1
BDK
BBK
BAK
IC337
IC333
DK1
DK2
MIXER
PGM
PVW
KF2
KF1
BBV
BAV
IC338
MULTIPLEX
PGM9-PGM0
CNX1
*1
IC338
MULTIPLEX
PVW9-PVW0
CNY1
*1
CNX1
C4
B4
C3
B3
C2
B2
C1
B1
H:CKD
L:CKD
H:ADD
L:ADD
H:WDATA
L:WDATA
H:RDATA
L:RDATA
IC1
IC1
IC1
IC2
IC3, 6, 7
CPU INTERFACE
CS
IC4
EEPROM
CNX1
*1
SLTAD4-SLTAD0
CNX1
A6
THERMO
TM1, IC5
THERMO
CNX1
B5
RST
CNX1
D4
CKX
CONTROL
CKD
ADR
DIO
RST
CKX
TP1 CKD
TP2 ADR
TP3 DIO
TP4 RSTL
TP5 CKX
TP6
HD
TP7
VDS
CNX1
D9
D10
D6
D5
D8
B6
C5
C8
CK (13.5M)
CK (27M)
HZ
VD
OE
SC
LALT
VBLK
IC20-22, 30-37
TIMING GENERATOR & CLOCK BUFFER
CK
HFCK
QTCK/SC
TIMING PULSE
TP8 CK
TP9 HFCK
TP10 QTCK

NOTE:
*1 ····· REFER TO SCHEMATIC

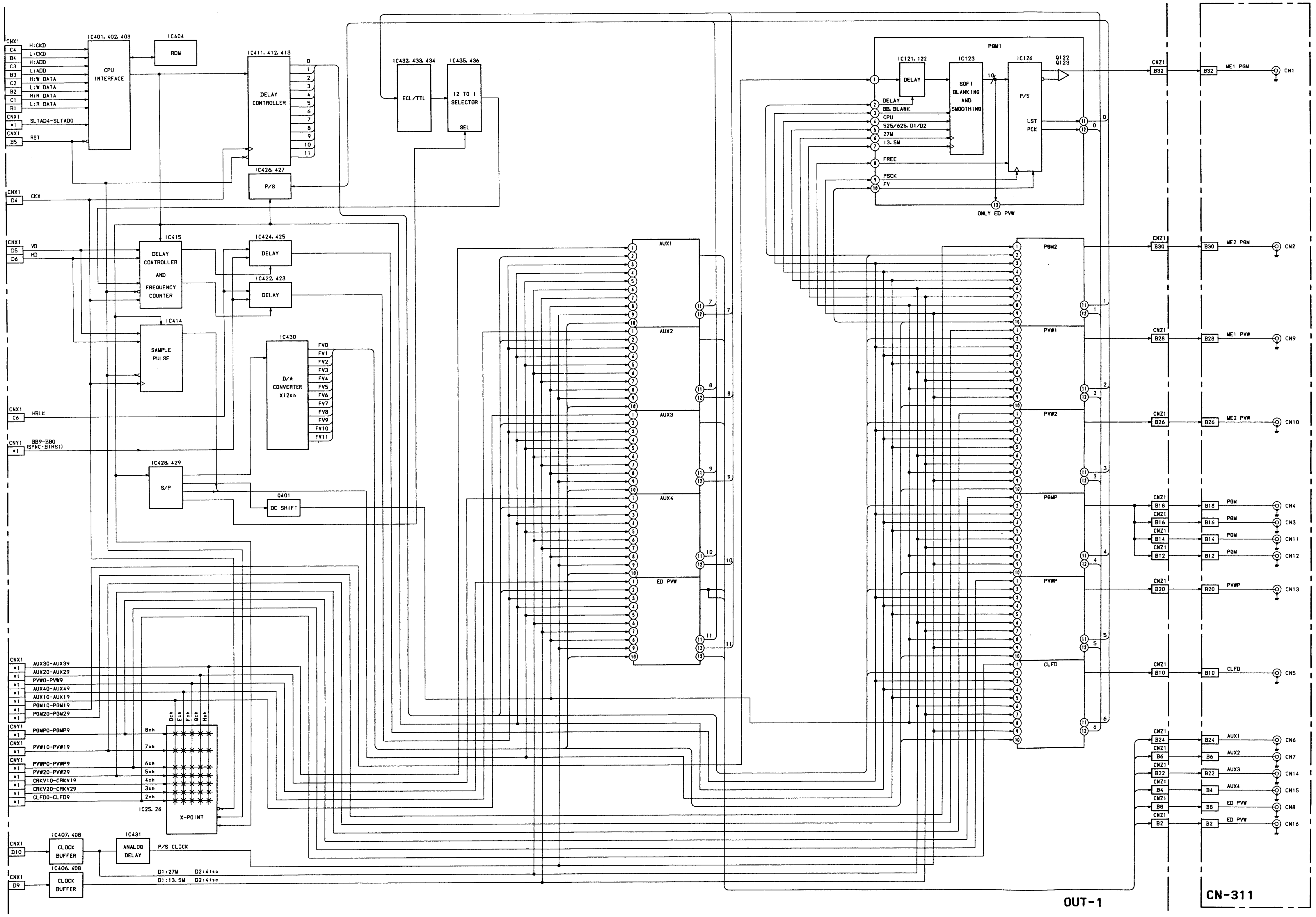
MIX-4
DVS-8000
MIX-4 (A)
DVS-8000C

DSK (DOWNSTREAM KEYER) BOARD


CNY1
*1
WSLD1 13-WSLD1 0
WSLD2 13-WSLD2 0
WSLD3 13-WSLD3 0
MASKD9-MASKD0
CNX1
KYSRD9-KYSRD0
BKGDA9-BKGDA0
BKGDB9-BKGDB0
IC100
BOX GENERATOR
FILLD9-FILLD0
IC300-302
8 INPUTS TO 6 OUTPUTS MATRIX SELECTOR
TRANSITION
IC305, 306
DELAY
INPUT SELECT
CN100
DIGITAL TP
MASK1
IC105, 106
DELAY
IC101-104
KEY1
IC107, 108
DELAY
IC111
FILTER
IC109, 110, 138
BKGDA
IC303
DEMULTIPLEX
IC319-322
DELAY
DELAY
BGA
BGA
BKGDB
IC303
DEMULTIPLEX
IC315-318
DELAY
DELAY
BGB
BGB
IC52-54
DELAY CONTROL
IC151-154
DELAY
IC304
DEMULTIPLEX
IC155-162
DELAY
DELAY
FL1
FL1
IC307
TRANSITION PROCESSOR
IC112
KEY1 PROCESSOR
IC308, 309
MACH CANCEL
IC310
LPF
NTRS
NTRS
IC113, 114
MACH CANCEL
IC115, 116
MACH CANCEL
IC119-130, 163
EDGE PROCESSOR
IC131-133
DELAY
IC51
DELAY CONTROL
IC58
MODE CONTROL
IC139
EDGE CONTROL
IC136
KEY DENSITY
IC139
EDGE DENSITY
IC140
OUTLINE ON/OFF
IC141, 142
LPF
BDKS1
BDKS1
IC146, 147
LPF
NRKS1
NRKS1
Y-BLOCK
C-BLOCK
BDKS1
IC341
KEY TRANSITION
IC339
TRANSITION CONTROL
NTRS
NRKS1
FL1
IC325, 327, 329
IC337
EDGE ADDER
IC323
KEY MATTE
IC323
EDGE MATTE
BGA
IC331, 333, 335
BGB
IC349
KEYMIX PVW
IC359
KEYMIX PGM
IC351
BKGDA TRANSITION
IC355
BKGD MIX
IC353
BKGDB TRANSITION
IC56
OFFSET CONTROL
IC361, 362
8 INPUTS TO 8 OUTPUTS MATRIX SELECTOR
IC367, 368
FADE TO BLACK
IC371
MULTIPLEX
PGM9-PGM0
IC369, 370
SAFE EREA
IC371
MULTIPLEX
PVW9-PVW0
IC372
MULTIPLEX
CLED9-CLED0
IC372
MULTIPLEX
OUTPUT SELECT
CN110
DIGITAL TP
CNX1
C4 H:CKD
B4 L:CKD
C3 H:ADD
B3 L:ADD
C2 H:WDATA
B2 L:WDATA
C1 H:RDATA
B1 L:RDATA
IC1
IC1
IC1
IC2
SLTAD4-SLTAD0
A6 THERMO
TM1, IC5
THERMO
B5 RST
IC3, 6, 7
CPU INTERFACE
CS
IC4
EEPROM
CONTROL
CKD
ADR
DIO
RST
CKX
TP1 CKD
TP2 ADR
TP3 DIO
TP4 RSTL
TP5 CKX
D4 CKX
D9 CK (13.5M)
D10 CK (27M)
D6 HZ
D5 VD
D8 OE
B6 SC
C5 LALT
C8 VBLK
IC20-22, 30-37
TIMING GENERATOR
TP6 HD
TP7 VDS
TP8 CK
TP9 HFCK
TP10 QTCK
CK
HFCK
QTCK/SC
TIMING PULSE

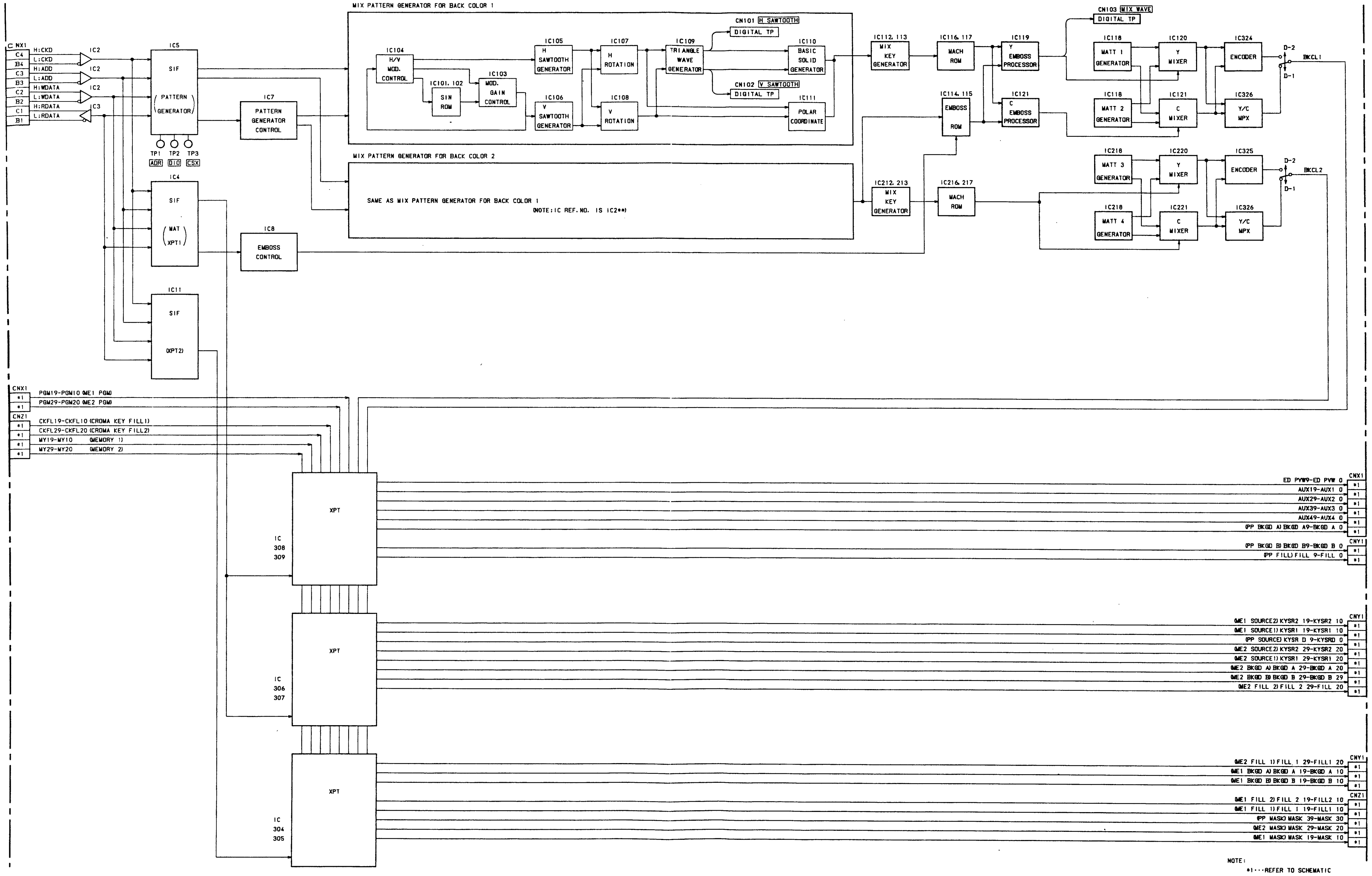
NOTE:
*1 ----- REFER TO SCHEMATIC

OUTPUT PROCESSOR BOARD


CNX1
C4
B4
C3
B3
C2
B2
C1
B1
H:CKD
L:CKD
H:ADD
L:ADD
H:W DATA
L:W DATA
H:R DATA
L:R DATA
SLTAD4-SLTAD0
*1
RST
B5
IC401, 402, 403
CPU INTERFACE
IC404
ROM
IC411, 412, 413
DELAY CONTROLLER
0
1
2
3
4
5
6
7
8
9
10
11
IC426, 427
P/S
IC432, 433, 434
ECL/TTL
IC435, 436
12 TO 1 SELECTOR
SEL
CKX
D4
VD
HD
D5
D6
IC415
DELAY CONTROLLER AND FREQUENCY COUNTER
IC424, 425
DELAY
IC422, 423
DELAY
IC414
SAMPLE PULSE
IC430
D/A CONVERTER X12ch
FV0
FV1
FV2
FV3
FV4
FV5
FV6
FV7
FV8
FV9
FV10
FV11
HBLK
C6
CNY1
BB9-BB0 (SYNC·BIRST)
IC428, 429
S/P
Q401
DC SHIFT
AUX30-AUX39
AUX20-AUX29
PVW0-PVW9
AUX40-AUX49
AUX10-AUX19
PGM10-PGM19
PGM20-PGM29
PGMP0-PGMP9
PVW10-PVW19
PVWP0-PVWP9
PVW20-PVW29
CRKV10-CRKV19
CRKV20-CRKV29
CLFD0-CLFD9
Dch
Ech
Fch
Gch
Hch
8ch
7ch
6ch
5ch
4ch
3ch
2ch
IC25, 26
X-POINT
IC407, 408
CLOCK BUFFER
D10
IC431
ANALOG DELAY
P/S CLOCK
IC406, 408
CLOCK BUFFER
D9
D1:27M D2:4fsc
D1:13.5M D2:4fsc
AUX1
AUX2
AUX3
AUX4
ED PVW
PGM1
IC121, 122
DELAY
IC123
SOFT BLANKING AND SMOOTHING
IC126
P/S
LST
PCK
Q122
Q123
10
DELAY
BB. BLANK
CPU
525/625, D1/D2
27M
13.5M
FREE
PSCK
FV
ONLY ED PVW
PGM2
PVW1
PVW2
PGMP
PVWP
CLFD
CNZ1
B32
ME1 PGM
CN1
B30
ME2 PGM
CN2
B28
ME1 PVW
CN9
B26
ME2 PVW
CN10
B18
PGM
CN4
B16
PGM
CN3
B14
PGM
CN11
B12
PGM
CN12
B20
PVWP
CN13
B10
CLFD
CN5
B24
AUX1
CN6
B6
AUX2
CN7
B22
AUX3
CN14
B4
AUX4
CN15
B8
ED PVW
CN8
B2
ED PVW
CN16
OUT-1
CN-311

NOTE:
*1····REFER TO SCHEMATIC

MATTE GENERATOR BOARD

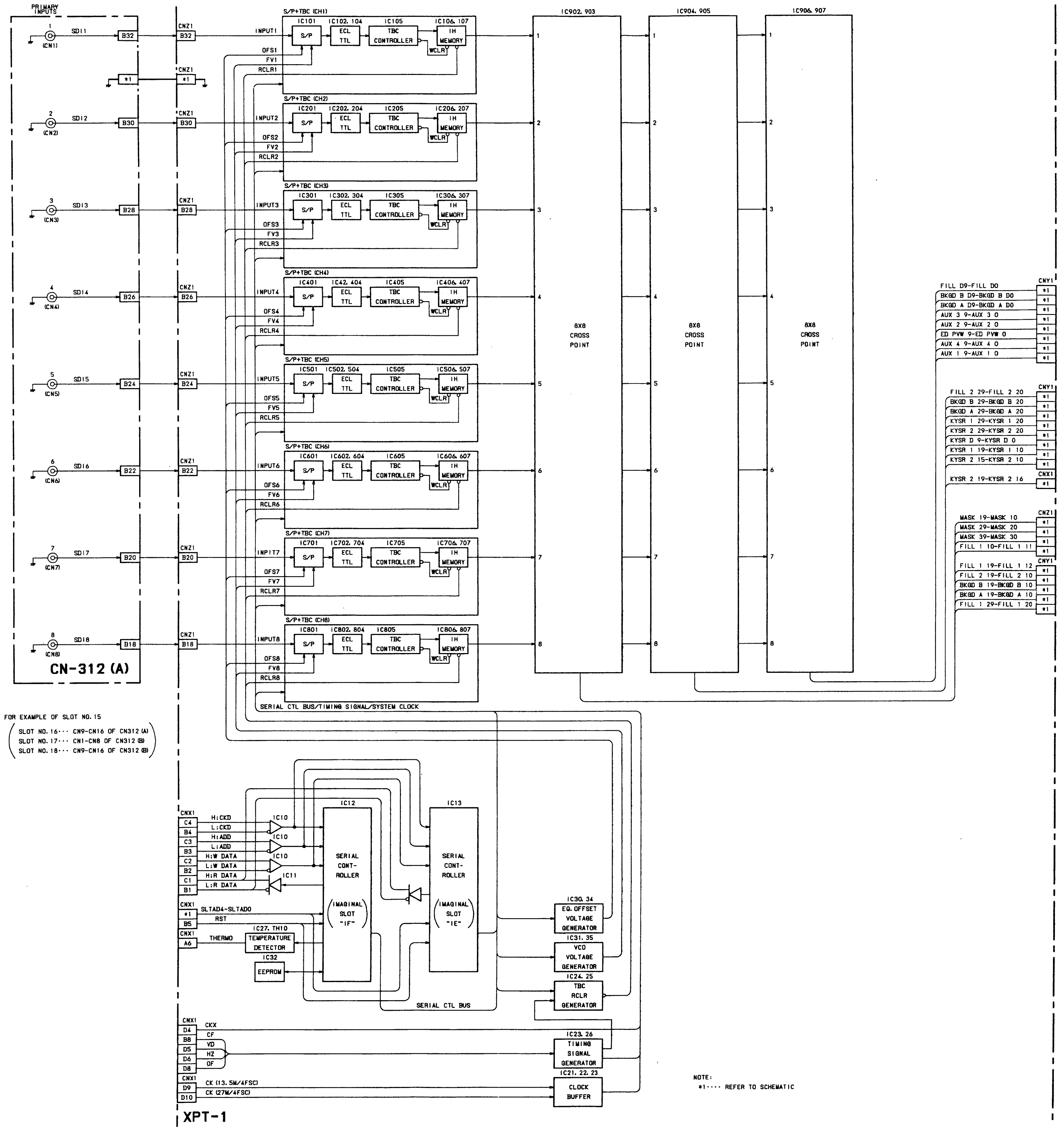

CNX1
C4
B4
C3
B3
C2
B2
C1
B1
H:CKD
L:CKD
H:ADD
L:ADD
H:WDATA
L:WDATA
H:RDATA
L:RDATA
IC2
IC2
IC2
IC3
IC5
SIF
(PATTERN GENERATOR)
TP1 TP2 TP3
ADR DIO CSX
IC7
PATTERN GENERATOR CONTROL
IC4
SIF
(MAT XPT1)
IC8
EMBOSS CONTROL
IC11
SIF
(XPT2)
MIX PATTERN GENERATOR FOR BACK COLOR 1
IC104
H/V MOD. CONTROL
IC101, 102
SIN ROM
IC103
MOD. GAIN CONTROL
IC105
H SAWTOOTH GENERATOR
IC106
V SAWTOOTH GENERATOR
IC107
H ROTATION
IC108
V ROTATION
IC109
TRIANGLE WAVE GENERATOR
CN101 H SAWTOOTH
DIGITAL TP
CN102 V SAWTOOTH
DIGITAL TP
IC110
BASIC SOLID GENERATOR
IC111
POLAR COORDINATE
MIX PATTERN GENERATOR FOR BACK COLOR 2
SAME AS MIX PATTERN GENERATOR FOR BACK COLOR 1
(NOTE:IC REF.NO. IS IC2**)
IC112, 113
MIX KEY GENERATOR
IC116, 117
MACH ROM
IC114, 115
EMBOSS ROM
IC119
Y EMBOSS PROCESSOR
IC121
C EMBOSS PROCESSOR
CN103 MIX WAVE
DIGITAL TP
IC212, 213
MIX KEY GENERATOR
IC216, 217
MACH ROM
IC118
MATT 1 GENERATOR
IC118
MATT 2 GENERATOR
IC218
MATT 3 GENERATOR
IC218
MATT 4 GENERATOR
IC120
Y MIXER
IC121
C MIXER
IC220
Y MIXER
IC221
C MIXER
IC324
ENCODER
IC326
Y/C MPX
IC325
ENCODER
IC326
Y/C MPX
D-2
D-1
BKCL1
D-2
D-1
BKCL2
CNX1
*1 PGM19-PGM10 (ME1 PGM)
*1 PGM29-PGM20 (ME2 PGM)
CNZ1
*1 CKFL19-CKFL10 (CROMA KEY FILL1)
*1 CKFL29-CKFL20 (CROMA KEY FILL2)
*1 MY19-MY10 (MEMORY 1)
*1 MY29-MY20 (MEMORY 2)
XPT
IC 308 309
XPT
IC 306 307
XPT
IC 304 305
CNX1
ED PVW9-ED PVW 0 *1
AUX19-AUX1 0 *1
AUX29-AUX2 0 *1
AUX39-AUX3 0 *1
AUX49-AUX4 0 *1
(PP BKGD A) BKGD A9-BKGD A 0 *1
CNY1
(PP BKGD B) BKGD B9-BKGD B 0 *1
(PP FILL) FILL 9-FILL 0 *1
CNY1
(ME1 SOURCE2) KYSR2 19-KYSR2 10 *1
(ME1 SOURCE1) KYSR1 19-KYSR1 10 *1
(PP SOURCE) KYSR D 9-KYSRD 0 *1
(ME2 SOURCE2) KYSR2 29-KYSR2 20 *1
(ME2 SOURCE1) KYSR1 29-KYSR1 20 *1
(ME2 BKGD A) BKGD A 29-BKGD A 20 *1
(ME2 BKGD B) BKGD B 29-BKGD B 29 *1
(ME2 FILL 2) FILL 2 29-FILL 20 *1
CNY1
(ME2 FILL 1) FILL 1 29-FILL1 20 *1
(ME1 BKGD A) BKGD A 19-BKGD A 10 *1
(ME1 BKGD B) BKGD B 19-BKGD B 10 *1
CNZ1
(ME1 FILL 2) FILL 2 19-FILL2 10 *1
(ME1 FILL 1) FILL 1 19-FILL1 10 *1
(PP MASK) MASK 39-MASK 30 *1
(ME2 MASK) MASK 29-MASK 20 *1
(ME1 MASK) MASK 19-MASK 10 *1

NOTE:
*1···REFER TO SCHEMATIC

MAT-1
DVS-8000

MAT-2
DVS-8000C

DIGITAL INPUT BOARD


PRIMARY INPUTS
1 SDI1 (CN1) B32
2 SDI2 (CN2) B30
3 SDI3 (CN3) B28
4 SDI4 (CN4) B26
5 SDI5 (CN5) B24
6 SDI6 (CN6) B22
7 SDI7 (CN7) B20
8 SDI8 (CN8) B18
*1
CN-312 (A)
CNZ1
B32
B30
B28
B26
B24
B22
B20
B18
S/P+TBC (CH1)
IC101 S/P
IC102, 104 ECL TTL
IC105 TBC CONTROLLER
IC106, 107 1H MEMORY
WCLR
INPUT1
OFS1
FV1
RCLR1
S/P+TBC (CH2)
IC201 S/P
IC202, 204 ECL TTL
IC205 TBC CONTROLLER
IC206, 207 1H MEMORY
INPUT2
OFS2
FV2
RCLR2
S/P+TBC (CH3)
IC301 S/P
IC302, 304 ECL TTL
IC305 TBC CONTROLLER
IC306, 307 1H MEMORY
INPUT3
OFS3
FV3
RCLR3
S/P+TBC (CH4)
IC401 S/P
IC42, 404 ECL TTL
IC405 TBC CONTROLLER
IC406, 407 1H MEMORY
INPUT4
OFS4
FV4
RCLR4
S/P+TBC (CH5)
IC501 S/P
IC502, 504 ECL TTL
IC505 TBC CONTROLLER
IC506, 507 1H MEMORY
INPUT5
OFS5
FV5
RCLR5
S/P+TBC (CH6)
IC601 S/P
IC602, 604 ECL TTL
IC605 TBC CONTROLLER
IC606, 607 1H MEMORY
INPUT6
OFS6
FV6
RCLR6
S/P+TBC (CH7)
IC701 S/P
IC702, 704 ECL TTL
IC705 TBC CONTROLLER
IC706, 707 1H MEMORY
INPIT7
OFS7
FV7
RCLR7
S/P+TBC (CH8)
IC801 S/P
IC802, 804 ECL TTL
IC805 TBC CONTROLLER
IC806, 807 1H MEMORY
INPUT8
OFS8
FV8
RCLR8
SERIAL CTL BUS/TIMING SIGNAL/SYSTEM CLOCK
IC902, 903
IC904, 905
IC906, 907
8X8 CROSS POINT
1 2 3 4 5 6 7 8
CNY1
FILL D9-FILL D0
BKGD B D9-BKGD B D0
BKGD A D9-BKGD A D0
AUX 3 9-AUX 3 0
AUX 2 9-AUX 2 0
ED PVW 9-ED PVW 0
AUX 4 9-AUX 4 0
AUX 1 9-AUX 1 0
CNY1
FILL 2 29-FILL 2 20
BKGD B 29-BKGD B 20
BKGD A 29-BKGD A 20
KYSR 1 29-KYSR 1 20
KYSR 2 29-KYSR 2 20
KYSR D 9-KYSR D 0
KYSR 1 19-KYSR 1 10
KYSR 2 15-KYSR 2 10
CNX1
KYSR 2 19-KYSR 2 16
CNZ1
MASK 19-MASK 10
MASK 29-MASK 20
MASK 39-MASK 30
FILL 1 10-FILL 1 11
CNY1
FILL 1 19-FILL 1 12
FILL 2 19-FILL 2 10
BKGD B 19-BKGD B 10
BKGD A 19-BKGD A 10
FILL 1 29-FILL 1 20
*1
CNX1
C4 H:CKD
B4 L:CKD
C3 H:ADD
B3 L:ADD
C2 H:W DATA
B2 L:W DATA
C1 H:R DATA
B1 L:R DATA
IC10
IC11
CNX1
*1 SLTAD4-SLTAD0
B5 RST
CNX1
A6 THERMO
IC27, TH10 TEMPERATURE DETECTOR
IC32 EEPROM
IC12 SERIAL CONT-ROLLER (IMAGINAL SLOT "IF")
IC13 SERIAL CONT-ROLLER (IMAGINAL SLOT "IE")
SERIAL CTL BUS
IC30, 34 EQ. OFFSET VOLTAGE GENERATOR
IC31, 35 VCO VOLTAGE GENERATOR
IC24, 25 TBC RCLR GENERATOR
CNX1
D4 CKX
B8 CF
D5 VD
D6 HZ
D8 OF
CNX1
D9 CK (13.5M/4FSC)
D10 CK (27M/4FSC)
IC23, 26 TIMING SIGNAL GENERATOR
IC21, 22, 23 CLOCK BUFFER
XPT-1

FOR EXAMPLE OF SLOT NO. 15

SLOT NO. 16··· CN9-CN16 OF CN312 (A)
SLOT NO. 17··· CN1-CN8 OF CN312 (B)
SLOT NO. 18··· CN9-CN16 OF CN312 (B)

NOTE:
*1···· REFER TO SCHEMATIC

XPT-1
DVS-8000
BKDS-8020 (OPTION)

SECTION 8
SEMICONDUCTOR ELECTRODES

ここに記載されているIC、トランジスタ、ダイオードは、それぞれの機能を等価的に表わしたものです。したがって互換性を表わすものではありません。(互換性のない型名が併記されている事もあります。）部品の交換をする時は、SPARE PARTSの章を参照して下さい。

ICs, transistors and diodes whoses functions are equivalent are described here. Therefore, incompatible device names may be described together. For parts replacement, refer to the Spare Parts section in this manual.

IC	PAGE
74ACT257SJ	8-2
74F02SJ	8-2
74F38SJ	8-2
74F86SJ	8-2
CAT35C104H	8-2
CX20158	8-2
CX20194	8-3
CX20201A-1	8-3
CX20201A-3	8-4
CX22029	8-4
CX23043	8-3
CX23065A	8-4
CXA1389AQ	8-4
CXD1095Q	8-5
CXD1217M	8-5
CXD1312Q	8-7
CXD1319AQ	8-9
CXD8026Q	8-10
CXD8052Q	8-11
CXD8053Q	8-13
CXD8055Q	8-14
CXD8056Q	8-16
CXD8058Q	8-17
CXD8059Q	8-18
CXD8060Q	8-19
CXD8061Q	8-20
CXD8062Q	8-21
CXD8063Q	8-23
CXD8065Q	8-24
CXD8066G	8-26
CXD8067G	8-27
CXD8110K	8-29
CXD8189AQ	8-30
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CXK581001M-70L	8-34
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GAL16V8A-10LP	8-35
GAL20V8A-10LP	8-36

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HD647180XOCP6	8-38
HM63021FP-28	8-40
ICL7621BCSA	8-40
LM1881M	8-40
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LT1009CZ	8-40
LT1171CT	8-41
MAX232CPE	8-41
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MB7112L	8-41
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MB81C78A-35P	8-42
MB8421-90LPFQ	8-42
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MC10125L	8-44
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SN74HC08ANS	8-50
SN74HC109NS	8-50

IC	PAGE
SN74HC138NS	8-50
SN74HC139NS	8-50
SN74HC153NS	8-50
SN74HC163NS	8-51
SN74HC164NS	8-51
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SN74HC393NS	8-51
SN74HC540NS	8-52
SN74HC564NS	8-52
SN74HC574ANS	8-52
SN74HC574NS	8-52
SN74HC74NS	8-52
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SN75ALS194N	8-53
SN75ALS195J	8-53
TC4S66F	8-53
TC74AC00F	8-49
TC74AC02F	8-50
TC74AC04F	8-50
TC74AC08F	8-53
TC74AC138F	8-50
TC74AC139F	8-50
TC74AC157F	8-53
TC74AC163F	8-51
TC74AC164F	8-51
TC74AC174F	8-53
TC74AC175F	8-54
TC74AC240F	8-54
TC74AC245F	8-54
TC74AC245P	8-54
TC74AC257F	8-2
TC74AC32F	8-54
TC74AC540F	8-52
TC74AC541F	8-54
TC74AC564F	8-52
TC74AC574F	8-52
TC74AC74F	8-52
TC74AC86F	8-54

IC	PAGE
TC74ACT04F	8-50
TC74ACT74F	8-52
TC74HC4051AF	8-55
TC74HC4053AF	8-55
TC74HCT541AF	8-54
TL084CNS	8-55
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uPC4558G2	8-55
uPD27C2001D	8-55
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DIODE	PAGE
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LN25RP	8-58
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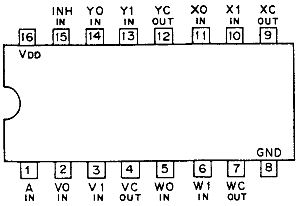
等価回路はICメーカーのData Bookに従いました。

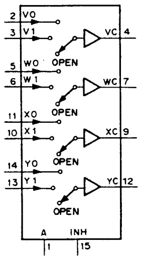
The circuit diagram of each IC is obtained from the IC data book published by the manufacturer.

IC

74ACT257SJ (NS) FLAT PACKAGE
TC74AC257F (TOSHIBA) FLAT PACKAGE

C-MOS 2-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
– TOP VIEW –


INH IN
Y0 IN
Y1 IN
YC OUT
X0 IN
X1 IN
XC OUT
16
15
14
13
12
11
10
9
VDD
GND
1
2
3
4
5
6
7
8
A IN
V0 IN
V1 IN
VC OUT
W0 IN
W1 IN
WC OUT


2 V0
3 V1
VC 4
5 W0
OPEN
6 W1
WC 7
11 X0
OPEN
10 X1
XC 9
14 Y0
OPEN
13 Y1
YC 12
OPEN
A
INH
1
15

CONT. IN		ON CHANNEL
INH	A	
0	0	0
0	1	1
1	X	OPEN

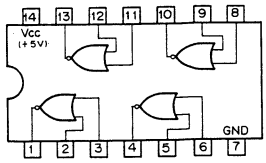
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

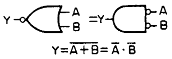
NOTE:

TYPE	VDD
74AC/74HC	+2 to +6V
74ACT	+5V
TC74AC257F	+2 to +5.5V

74F02SJ (NS) FLAT PACKAGE

TTL 2-INPUT POSITIVE-NOR GATE
– TOP VIEW –


14
13
12
11
10
9
8
Vcc (+5V)
GND
1
2
3
4
5
6
7



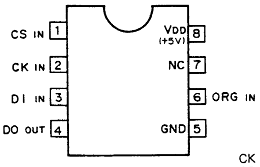
$Y=\overline{A+B}=\overline{A}\cdot\overline{B}$

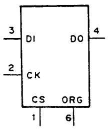
A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

0: LOW LEVEL
1; HIGH LEVEL

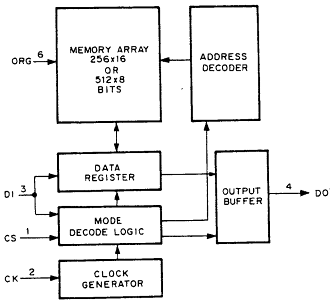
CAT35C104H (CATALYST SEMICONDUCTOR)

C-MOS 4K-BIT SERIAL EEPROM
– TOP VIEW –


CS IN 1
CK IN 2
DI IN 3
DO OUT 4
VDD (+5V) 8
NC 7
6 ORG IN
GND 5

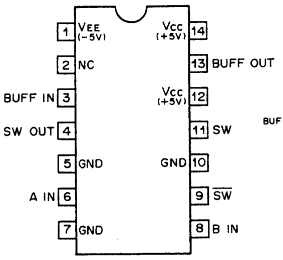

3
DI
DO
4
2
CK
CS
ORG
1
6

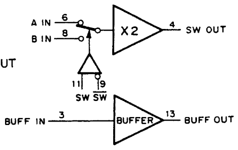
CK ; CLOCK INPUT
CS ; CHIP SELECT
DI ; SERIAL DATA INPUT
DO ; SERIAL DATA OUTPUT
ORG ; MEMORY ORGANIZATION (256×16/$\overline{512\times8}$)


ORG 6
MEMORY ARRAY 256x16 OR 512x8 BITS
ADDRESS DECODER
DATA REGISTER
DI 3
MODE DECODE LOGIC
OUTPUT BUFFER
4 DO
CS 1
CK 2
CLOCK GENERATOR

CX20158 (SONY) FLAT PACKAGE

VIDEO SWITCHER AND BUFFER
– TOP VIEW –


1 VEE (-5V)
2 NC
BUFF IN 3
SW OUT 4
5 GND
A IN 6
7 GND
Vcc (+5V) 14
13 BUFF OUT
Vcc (+5V) 12
11 SW
GND 10
9 SW
8 B IN

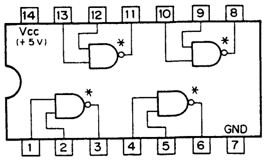

A IN 6
B IN 8
X2
4 SW OUT
11
9
SW SW
BUFF IN 3
BUFFER
13 BUFF OUT

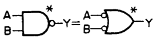
SW	$\overline{SW}$	INPUT
0	0	—
0	1	B
1	0	A
1	1	—

0; LOW LEVEL
1; HIGH LEVEL
–; INDEFINITE

74F38SJ (NS) FLAT PACKAGE

TTL 2-INPUT POSITIVE-NAND GATE BUFFER
WITH OPEN-COLLECTOR
– TOP VIEW –


14
13
12
11
10
9
8
Vcc (+5V)
*
*
*
*
GND
1
2
3
4
5
6
7



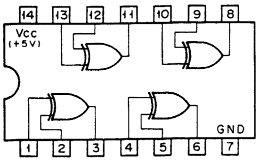
$Y=\overline{A\cdot B}=\overline{A}+\overline{B}$

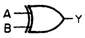
A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL
∗ ; OPEN COLLECTOR

74F86SJ (NS) FLAT PACKAGE

TTL EXCLUSIVE OR GATE
– TOP VIEW –


14
13
12
11
10
9
8
Vcc (+5V)
GND
1
2
3
4
5
6
7



$Y=\overline{A}\cdot B+A\cdot\overline{B}$

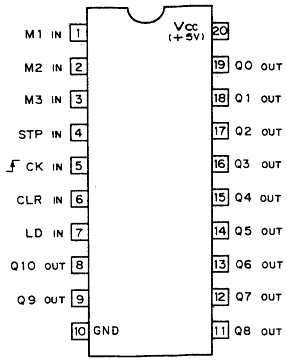
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

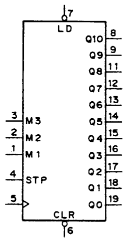
0; LOW LEVEL
1; HIGH LEVEL

CX20194 (SONY)

BIPOLAR 11-BIT SYNCHRONOUS BINARY COUNTER

- TOP VIEW -

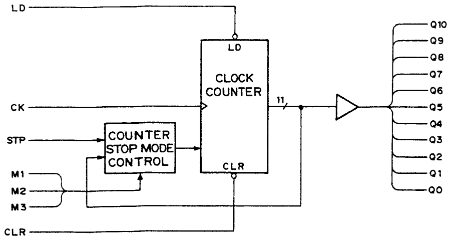

M1 IN 1
M2 IN 2
M3 IN 3
STP IN 4
CK IN 5
CLR IN 6
LD IN 7
Q10 OUT 8
Q9 OUT 9
10 GND
Vcc (+5V) 20
19 Q0 OUT
18 Q1 OUT
17 Q2 OUT
16 Q3 OUT
15 Q4 OUT
14 Q5 OUT
13 Q6 OUT
12 Q7 OUT
11 Q8 OUT


7
LD
Q10 8
Q9 9
Q8 11
Q7 12
Q6 13
Q5 14
Q4 15
Q3 16
Q2 17
Q1 18
Q0 19
3 M3
2 M2
1 M1
4 STP
5
CLR
6

M3	M2	M1	COUNT *
0	0	0	909
0	0	1	910
0	1	0	1024
0	1	1	1135
1	0	0	525
1	0	1	625
1	1	0	1125
1	1	1	2048

*; DECIMAL NUMBER
0; LOW LEVEL
1; HIGH LEVEL

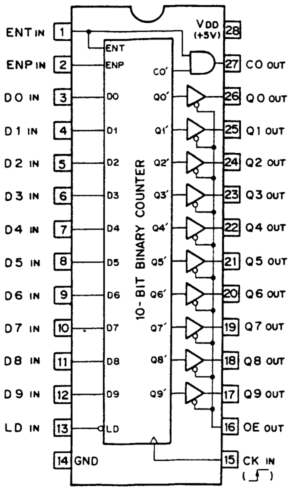
M1, M2, M3; COUNT LIMIT SETTING SIGNAL INPUT
STP; COUNTER STOP MODE CONTROL INPUT
CLR; SYNCHRONOUS COUNTER CLEAR INPUT
LD; ASYNCHRONOUS COUNTER LOAD INPUT

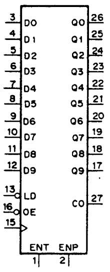

LD
CK
STP
M1
M2
M3
CLR
COUNTER STOP MODE CONTROL
LD
CLOCK COUNTER
CLR
11
Q10
Q9
Q8
Q7
Q6
Q5
Q4
Q3
Q2
Q1
Q0

CX23043 (SONY)

N-MOS SYNCHRONOUS 10-BIT BINARY COUNTER

- TOP VIEW -


ENT IN 1
ENP IN 2
D0 IN 3
D1 IN 4
D2 IN 5
D3 IN 6
D4 IN 7
D5 IN 8
D6 IN 9
D7 IN 10
D8 IN 11
D9 IN 12
LD IN 13
14 GND
VDD (+5V) 28
27 CO OUT
26 Q0 OUT
25 Q1 OUT
24 Q2 OUT
23 Q3 OUT
22 Q4 OUT
21 Q5 OUT
20 Q6 OUT
19 Q7 OUT
18 Q8 OUT
17 Q9 OUT
16 OE OUT
15 CK IN
ENT
ENP
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
LD
CO'
Q0'
Q1'
Q2'
Q3'
Q4'
Q5'
Q6'
Q7'
Q8'
Q9'
10-BIT BINARY COUNTER


3 D0
4 D1
5 D2
6 D3
7 D4
8 D5
9 D6
10 D7
11 D8
12 D9
13 LD
16 OE
15
Q0 26
Q1 25
Q2 24
Q3 23
Q4 22
Q5 21
Q6 20
Q7 19
Q8 18
Q9 17
CO 27
ENT ENP
1 2

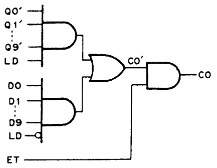
ENT	ENP	LD	FUNCTION
1	1	1	COUNT
0	X	1	NO COUNT
X	0	1	NO COUNT
X	X	0	LOAD

OE	Q0 to Q9 OUTPUT
0	Q0' to Q9'
1	HI-IMPEDANCE

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

Q0 to Q9; OUTPUTS
Q0' to Q9'; COUNTER OUTPUTS
D0 to D9; INPUTS DATA
CO; CARRY OUTPUT
OE; OUTPUT ENABLE
LD; INPUT DATA LOAD
ENT; CLOCK & CARRY OUT ENABLE
ENP; CLOCK ENABLE
CK; CLOCK INPUT

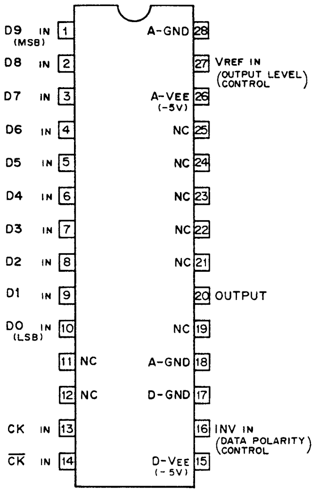
CARRY OUTPUT "CO"

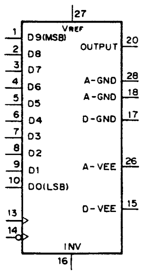

Q0'
Q1'
Q9'
LD
D0
D1
D9
LD
ET
CO'
CO

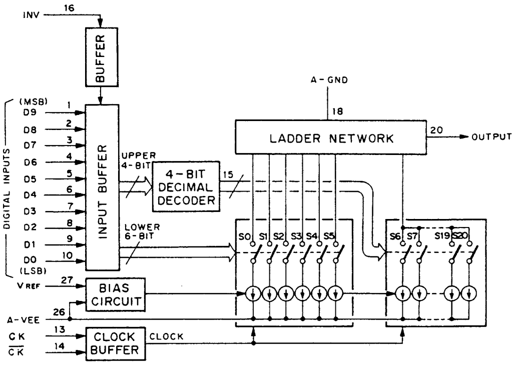
CX20201A-1 (SONY) FLAT PACKAGE

ECL 10-BIT D/A CONVERTER

- TOP VIEW -


D9 IN (MSB) 1
D8 IN 2
D7 IN 3
D6 IN 4
D5 IN 5
D4 IN 6
D3 IN 7
D2 IN 8
D1 IN 9
D0 IN (LSB) 10
11 NC
12 NC
CK IN 13
CK IN 14
A-GND 28
27 VREF IN (OUTPUT LEVEL CONTROL)
A-VEE (-5V) 26
NC 25
NC 24
NC 23
NC 22
NC 21
20 OUTPUT
NC 19
A-GND 18
D-GND 17
16 INV IN (DATA POLARITY CONTROL)
D-VEE (-5V) 15


27
VREF
1 D9(MSB)
2 D8
3 D7
4 D6
5 D5
6 D4
7 D3
8 D2
9 D1
10 D0(LSB)
13
14
OUTPUT 20
A-GND 28
A-GND 18
D-GND 17
A-VEE 26
D-VEE 15
INV
16


INV
16
BUFFER
(MSB)
D9
D8
D7
D6
D5
D4
D3
D2
D1
D0
(LSB)
DIGITAL INPUTS
1
2
3
4
5
6
7
8
9
10
INPUT BUFFER
UPPER 4-BIT
LOWER 6-BIT
4-BIT DECIMAL DECODER
15
A-GND
18
LADDER NETWORK
20
OUTPUT
S0 S1 S2 S3 S4 S5
S6 S7 S19 S20
VREF
27
BIAS CIRCUIT
A-VEE
26
CK
13
CK
14
CLOCK BUFFER
CLOCK

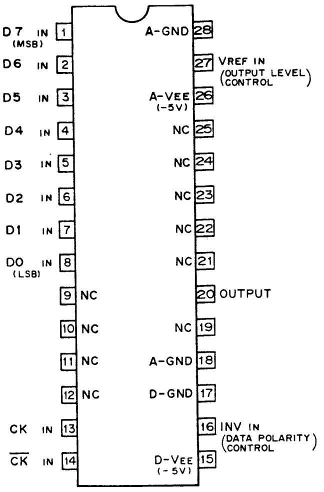
INV SELECTION

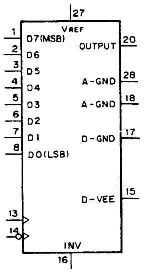
DATA INPUTS										OUTPUT	
D9	D8	D7	D6	D5	D4	D3	D2	D1	D0	INV "0"	INV "1"
1	1	1	1	1	1	1	1	1	1	Vo(OS)	Vo(OS) -1.000V
1	1	1	1	1	1	1	1	1	0	Vo(OS) - 0.001V	Vo(OS) -0.999V
1	1	1	1	1	1	1	1	1	1	Vo(OS) - 0.002V	Vo(OS) -0.998V
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
1	0	0	0	0	0	0	0	0	0	Vo(OS) - 0.500V	Vo(OS) - 0.502V
0	1	1	1	1	1	1	1	1	1	Vo(OS) - 0.501V	Vo(OS) - 0.501V
0	1	1	1	1	1	1	1	1	0	Vo(OS) - 0.502V	Vo(OS) - 0.500V
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
0	0	0	0	0	0	0	0	0	0	Vo(OS) - 1.000V	Vo(OS)

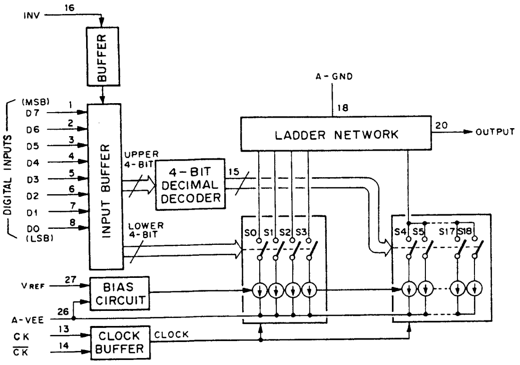
1; ECL HIGH LEVEL (= -0.89V)
0; ECL LOW LEVEL (= -1.75V)
Vo(OS); ZERO OFFSET

CX20201A-3 (SONY) FLAT PACKAGE

ECL 8-BIT D/A CONVERTER
– TOP VIEW –


D7 IN 1 (MSB)
D6 IN 2
D5 IN 3
D4 IN 4
D3 IN 5
D2 IN 6
D1 IN 7
D0 IN 8 (LSB)
9 NC
10 NC
11 NC
12 NC
CK IN 13
CK̄ IN 14
A-GND 28
27 VREF IN (OUTPUT LEVEL CONTROL)
A-VEE 26 (-5V)
NC 25
NC 24
NC 23
NC 22
NC 21
20 OUTPUT
NC 19
A-GND 18
D-GND 17
16 INV IN (DATA POLARITY CONTROL)
D-VEE 15 (-5V)


27
VREF
D7(MSB)
D6
D5
D4
D3
D2
D1
D0(LSB)
OUTPUT 20
A-GND 28
A-GND 18
D-GND 17
D-VEE 15
13
14
INV
16


INV 16
BUFFER
DIGITAL INPUTS
(MSB) D7 1
D6 2
D5 3
D4 4
D3 5
D2 6
D1 7
D0 8 (LSB)
INPUT BUFFER
UPPER 4-BIT
LOWER 4-BIT
4-BIT DECIMAL DECODER
15
A-GND
18
LADDER NETWORK
20 OUTPUT
S0 S1 S2 S3
S4 S5 S17 S18
VREF 27
BIAS CIRCUIT
A-VEE 26
CK 13
CK̄ 14
CLOCK BUFFER
CLOCK

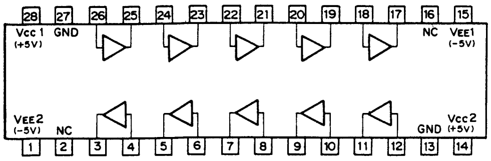
INV SELECTION

DATA INPUTS								OUTPUT	
D7	D6	D5	D4	D3	D2	D1	D0	INV "0"	INV "1"
1	1	1	1	1	1	1	1	Vo(OS)	Vo(OS)-1.000V
1	1	1	1	1	1	1	0	Vo(OS)-0.004V	Vo(OS)-0.996V
1	1	1	1	1	1	0	1	Vo(OS)-0.008V	Vo(OS)-0.992V
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
1	0	0	0	0	0	0	0	Vo(OS)-0.500V	Vo(OS)-0.504V
0	1	1	1	1	1	1	1	Vo(OS)-0.504V	Vo(OS)-0.500V
0	1	1	1	1	1	1	0	Vo(OS)-0.508V	Vo(OS)-0.496V
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
0	0	0	0	0	0	0	0	Vo(OS)-1.000V	Vo(OS)

1 ; ECL HIGH LEVEL (= -0.89V)
0 ; ECL LOW LEVEL (= -1.75V)
Vo(OS) ; ZERO OFFSET

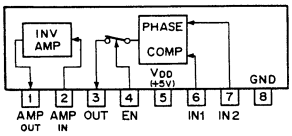
CX22029 (SONY)

TTL-TO-ECL TRANSLATOR
– TOP VIEW –


28 27 26 25 24 23 22 21 20 19 18 17 16 15
Vcc1 (+5V)
GND
NC
VEE1 (-5V)
VEE2 (-5V)
NC
GND
Vcc2 (+5V)
1 2 3 4 5 6 7 8 9 10 11 12 13 14

CX23065A (SONY)

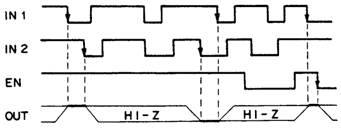
N-MOS PHASE COMPARATOR WITH INVERSION AMPLIFIER
– PRINTED SIDE VIEW –


INV AMP
PHASE COMP
VDD (+5V)
GND
1 2 3 4 5 6 7 8
AMP OUT
AMP IN
OUT
EN
IN1
IN2

EN	OUT
1	ACTIVE
0	HIGH IMPEDANCE

1 ; HIGH LEVEL
0 ; LOW LEVEL

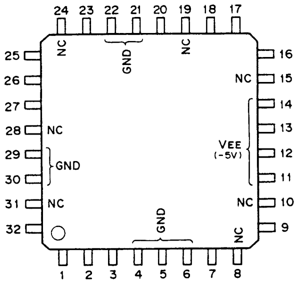
TIMING CHART

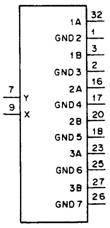


HI-Z ; HI-IMPEDANCE

CXA1389AQ (SONY)

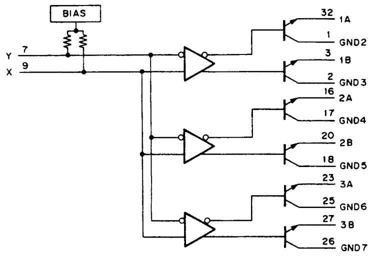
CABLE DRIVER
– TOP VIEW –


24 23 22 21 20 19 18 17
NC
NC
GND
NC
25
26
27
28 NC
29 GND
30
31 NC
32
16
15 NC
14
13
12 VEE (-5V)
11
10 NC
9
GND
NC
1 2 3 4 5 6 7 8

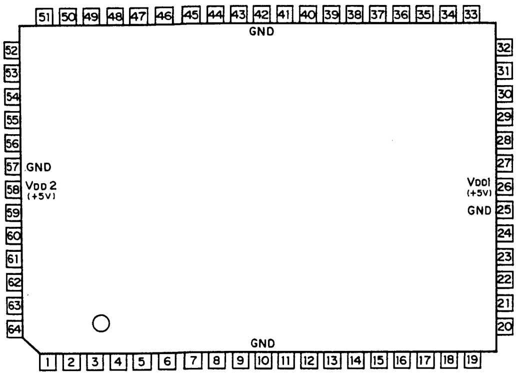

7 Y
9 X
1A 32
GND2 1
1B 3
GND3 2
2A 16
GND4 17
2B 20
GND5 18
3A 23
GND6 25
3B 27
GND7 26

(VEE = – 5V)

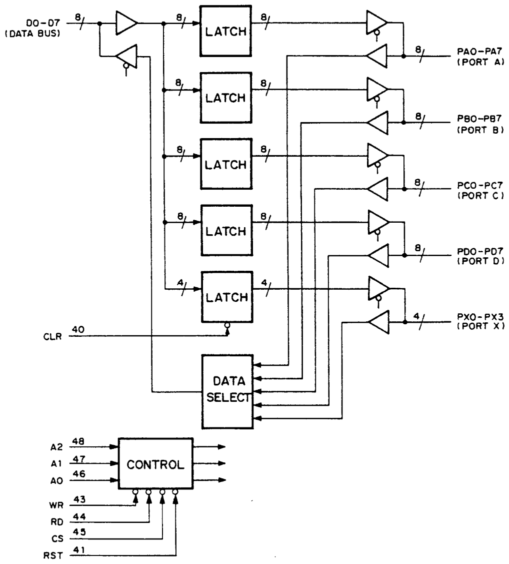
PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	–	GND2	9	I	X	17	–	GND4	25	–	GND6
2	–	GND3	10	–	NC	18	–	GND5	26	–	GND7
3	O	1B	11	–	VEE	19	–	NC	27	O	3B
4	–	GND	12	–	VEE	20	O	2B	28	–	NC
5	–	GND	13	–	VEE	21	–	GND	29	–	GND
6	–	GND	14	–	VEE	22	–	GND	30	–	GND
7	I	Y	15	–	NC	23	O	3A	31	–	NC
8	–	NC	16	O	2A	24	–	NC	32	O	1A

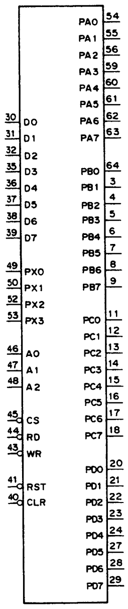

BIAS
Y 7
X 9
32 1A
1 GND2
3 1B
2 GND3
16 2A
17 GND4
20 2B
18 GND5
23 3A
25 GND6
27 3B
26 GND7

CXD1095Q (SONY) FLAT PACKAGE
C-MOS I/O PORT EXPANDER
- TOP VIEW -


51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33
GND
52 53 54 55 56
57 GND
58 VDD2 (+5V)
59 60 61 62 63 64
32 31 30 29 28 27
VDD1 (+5V) 26
GND 25
24 23 22 21 20
GND
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL
1			NC	17	○	○	PC6	33			NC	49	○	○	PX0
2			NC	18	○	○	PC7	34			NC	50	○	○	PX1
3	○	○	PB1	19			NC	35	○	○	D3	51			NC
4	○	○	PB2	20	○	○	PD0	36	○	○	D4	52	○	○	PX2
5	○	○	PB3	21	○	○	PD1	37	○	○	D5	53	○	○	PX3
6	○	○	PB4	22	○	○	PD2	38	○	○	D6	54	○	○	PA0
7	○	○	PB5	23	○	○	PD3	39	○	○	D7	55	○	○	PA1
8	○	○	PB6	24	○	○	PD4	40	○		CLR	56	○	○	PA2
9	○	○	PB7	25			GND	41	○		RST	57			GND
10			GND	26	○		VDD (+5V)	42			GND	58	○		VDD (+5V)
11	○	○	PC0	27	○	○	PD5	43	○		WR	59	○	○	PA3
12	○	○	PC1	28	○	○	PD6	44	○		RD	60	○	○	PA4
13	○	○	PC2	29	○	○	PD7	45	○		CS	61	○	○	PA5
14	○	○	PC3	30	○	○	D0	46	○		A0	62	○	○	PA6
15	○	○	PC4	31	○	○	D1	47	○		A1	63	○	○	PA7
16	○	○	PC5	32	○	○	D2	48	○		A2	64	○	○	PB0


D0-D7 (DATA BUS)
8
LATCH
PA0-PA7 (PORT A)
PB0-PB7 (PORT B)
PC0-PC7 (PORT C)
PD0-PD7 (PORT D)
PX0-PX3 (PORT X)
4
CLR 40
DATA SELECT
A2 48
A1 47
A0 46
CONTROL
WR 43
RD 44
CS 45
RST 41

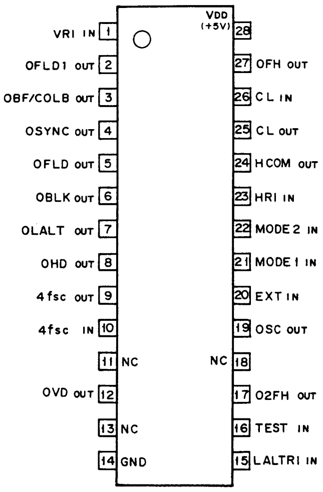

30 D0
31 D1
32 D2
35 D3
36 D4
37 D5
38 D6
39 D7
49 PX0
50 PX1
52 PX2
53 PX3
46 A0
47 A1
48 A2
45 CS
44 RD
43 WR
41 RST
40 CLR
PA0 54
PA1 55
PA2 56
PA3 59
PA4 60
PA5 61
PA6 62
PA7 63
PB0 64
PB1 3
PB2 4
PB3 5
PB4 6
PB5 7
PB6 8
PB7 9
PC0 11
PC1 12
PC2 13
PC3 14
PC4 15
PC5 16
PC6 17
PC7 18
PD0 20
PD1 21
PD2 22
PD3 23
PD4 24
PD5 27
PD6 28
PD7 29

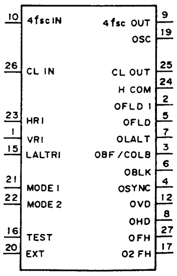
CS	RD	WR	A2	A1	A0	MODE
0	0	1	0	0	0	PORT A → DATA BUS
0	0	1	0	0	1	PORT B → DATA BUS
0	0	1	0	1	0	PORT C → DATA BUS
0	0	1	0	1	1	PORT D → DATA BUS
0	0	1	1	0	0	PORT X → DATA BUS
0	0	1	1	0	1	――
0	0	1	1	1	0	――
0	0	1	1	1	1	――
0	1	0	0	0	0	DATA BUS → PORT A
0	1	0	0	0	1	DATA BUS → PORT B
0	1	0	0	1	0	DATA BUS → PORT C
0	1	0	0	1	1	DATA BUS → PORT D
0	1	0	1	0	0	DATA BUS → PORT X
0	1	0	1	0	1	――
0	1	0	1	1	0	DATA BUS → CTL REG.1
0	1	0	1	1	1	DATA BUS → CTL REG.2
1	X	X	X	X	X	DATA BUS ; HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z , HIGH IMPEDANCE

D0-D7 ; DATA BUS INPUTS/OUTPUTS
CS ; CHIP SELECT INPUT
RD ; READ STROBE INPUT
WR ; WRITE STROBE INPUT
A0-A2 ; ADDRESS INPUT
RST ; RESET INPUT
CLR ; CLEAR INPUT
PA0-PA7 ; PORT A INPUTS/OUTPUTS
PB0-PB7 ; PORT B INPUTS/OUTPUTS
PC0-PC7 ; PORT C INPUTS/OUTPUTS
PD0-PD7 ; PORT D INPUTS/OUTPUTS
PX0-PX3 ; PORT X INPUTS/OUTPUTS

CXD1217M (SONY) FLAT PACKAGE
C-MOS SYNC GENERATOR
- TOP VIEW -


VRI IN 1
OFLD1 OUT 2
OBF/COLB OUT 3
OSYNC OUT 4
OFLD OUT 5
OBLK OUT 6
OLALT OUT 7
OHD OUT 8
4fsc OUT 9
4fsc IN 10
11 NC
OVD OUT 12
13 NC
14 GND
VDD (+5V) 28
27 OFH OUT
26 CL IN
25 CL OUT
24 HCOM OUT
23 HRI IN
22 MODE 2 IN
21 MODE 1 IN
20 EXT IN
19 OSC OUT
NC 18
17 O2FH OUT
16 TEST IN
15 LALTRI IN

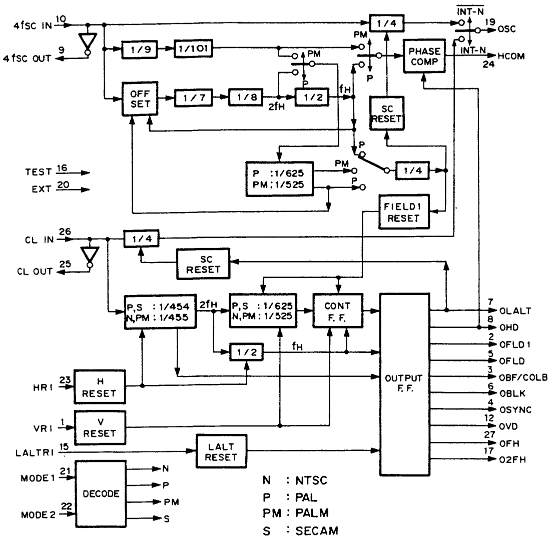

10 4fscIN
26 CL IN
23 HRI
1 VRI
15 LALTRI
21 MODE 1
22 MODE 2
16 TEST
20 EXT
4fsc OUT 9
OSC 19
CL OUT 25
H COM 24
OFLD 1 2
OFLD 5
OLALT 7
OBF/COLB 3
OBLK 6
OSYNC 4
OVD 12
OHD 8
OFH 27
O2 FH 17

SYSTEM	4fsc	CLOCK
NTSC	910fH	910fH
PAL	1135fH+2fV	908fH
PALM	909fH	910fH
SECAM	—	908fH

INPUT		SYSTEM
MODE1	MODE2	
0	0	NTSC
0	1	SECAM
1	0	PALM
1	1	PAL

0 ; LOW LEVEL
1 ; HIGH LEVEL

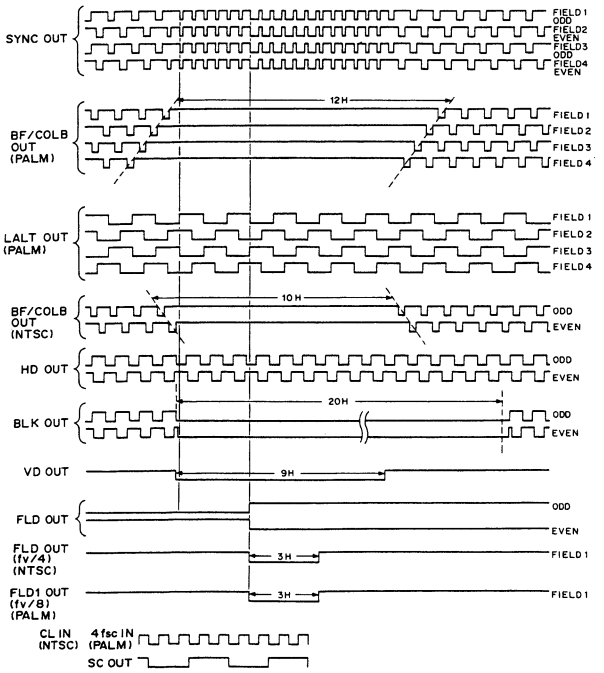
IC


4fsc IN 10
4 fsc OUT 9
1/9
1/101
1/4
PM
P
PHASE COMP
INT-N
19 OSC
INT-N
HCOM 24
OFF SET
1/7
1/8
2fH
1/2
fH
SC RESET
TEST 16
EXT 20
P :1/625
PM:1/525
1/4
FIELD1 RESET
CL IN 26
CL OUT 25
1/4
SC RESET
P,S :1/454
N,PM:1/455
2fH
P,S :1/625
N,PM:1/525
CONT F.F.
1/2
fH
OUTPUT F.F.
7 OLALT
8 OHD
2 OFLD1
5 OFLD
3 OBF/COLB
6 OBLK
4 OSYNC
12 OVD
27 OFH
17 O2FH
HRI 23
H RESET
VRI 1
V RESET
LALTRI 15
LALT RESET
MODE1 21
MODE2 22
DECODE
N
P
PM
S
N : NTSC
P : PAL
PM : PALM
S : SECAM

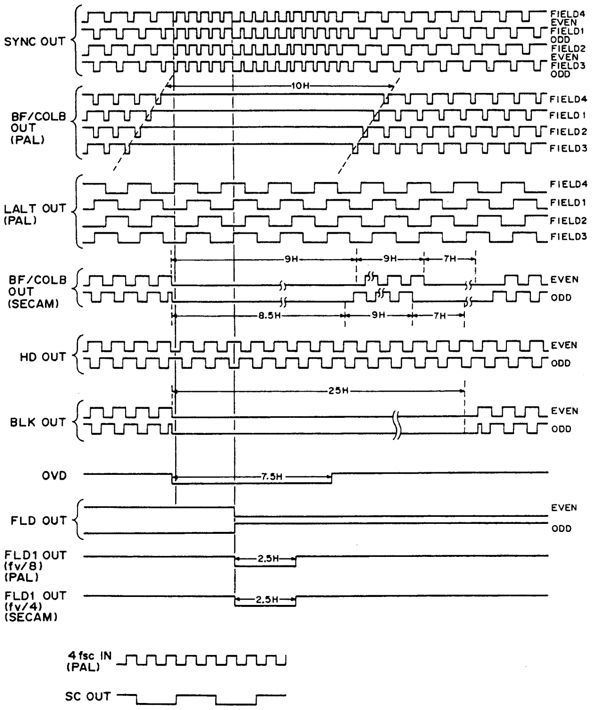
INPUT
4fSC IN ; 4fSC INPUT
CL IN ; CLOCK INPUT
EXT ; SYNC MODE SELECT
(L ; INTERNAL/H ; EXTERNAL)
HRI ; H RESET
LALTRI ; LINE CHANGE RESET
MODE 1,2 ; SYSTEM SELECT
VRI ; V RESET

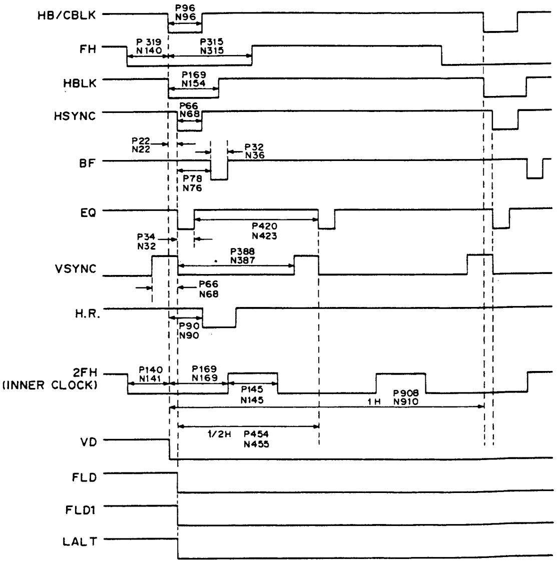
OUT PUT
4fSC OUT ; 4fSC OUTPUT
CL OUT ; CLOCK OUTPUT
HCOM ; PHASE COMPARATOR
O2fH ; 2fH OUTPUT
OBF/COLB : BURST FLAG/COLOR BLANKING
OBLK ; COMPOSITE BLANKING
OFH ; H FREQUENCE
OFLD ; EVEN, ODD
OFLD1 ; FIELD1
OHD ; H DRIVE
OLALT ; LINE CHANGE
OSC ; SUBCARRIER
OSYNC ; COMPOSITE SYNC
OVD ; V DRIVE

(NTSC, PALM)


SYNC OUT
FIELD1 ODD
FIELD2 EVEN
FIELD3 ODD
FIELD4 EVEN
12H
BF/COLB OUT (PALM)
FIELD1
FIELD2
FIELD3
FIELD4
LALT OUT (PALM)
FIELD 1
FIELD 2
FIELD 3
FIELD 4
10 H
BF/COLB OUT (NTSC)
ODD
EVEN
HD OUT
ODD
EVEN
20H
BLK OUT
ODD
EVEN
VD OUT
9H
FLD OUT
ODD
EVEN
FLD OUT (fv/4) (NTSC)
3H
FIELD1
FLD1 OUT (fv/8) (PALM)
3H
FIELD1
CL IN (NTSC)
4 fsc IN (PALM)
SC OUT

(PAL, SECAM)


SYNC OUT
FIELD4 EVEN
FIELD1 ODD
FIELD2 EVEN
FIELD3 ODD
10H
BF/COLB OUT (PAL)
FIELD4
FIELD1
FIELD2
FIELD3
LALT OUT (PAL)
FIELD4
FIELD1
FIELD2
FIELD3
9H
9H
7H
BF/COLB OUT (SECAM)
EVEN
ODD
8.5H
9H
7H
HD OUT
EVEN
ODD
25H
BLK OUT
EVEN
ODD
OVD
7.5H
FLD OUT
EVEN
ODD
FLD1 OUT (fv/8) (PAL)
2.5H
FLD1 OUT (fv/4) (SECAM)
2.5H
4 fsc IN (PAL)
SC OUT

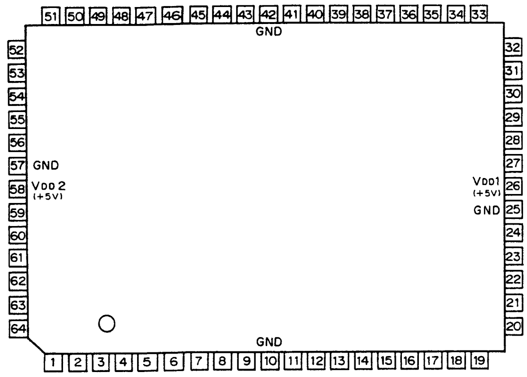

HB/CBLK
P96
N96
FH
P 319
N 140
P315
N315
HBLK
P169
N154
HSYNC
P66
N68
BF
P22
N22
P32
N36
P78
N76
EQ
P420
N423
P34
N32
P388
N387
VSYNC
P66
N68
H.R.
P90
N90
2FH (INNER CLOCK)
P140
N141
P169
N169
P145
N145
P908
N910
1H
1/2H
P454
N455
VD
FLD
FLD1
LALT

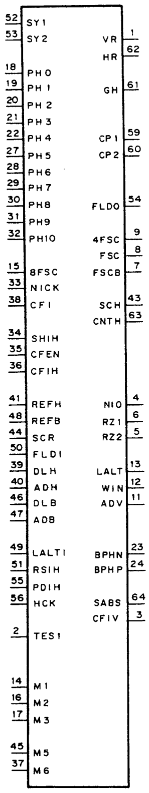
P: PAL, SECAM
N: NTSC, PALM

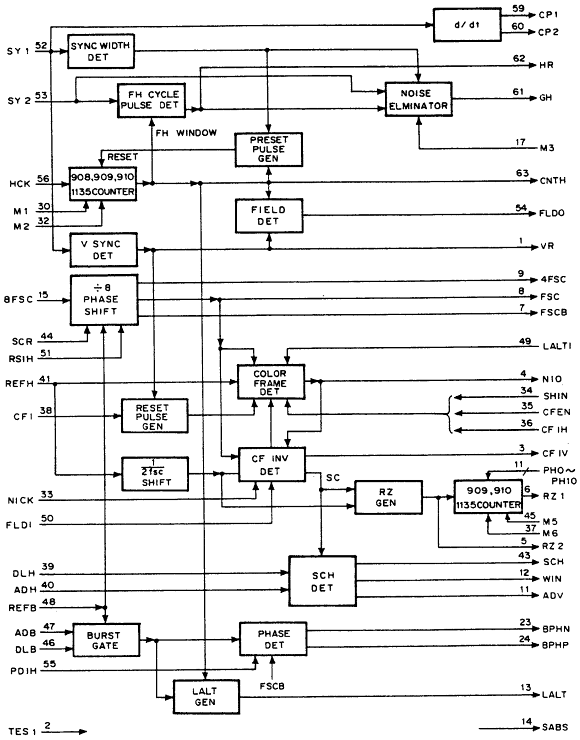
CXD1312Q (SONY) FLAT PACKAGE

C-MOS VIDEO CLOCK GENERATOR

- TOP VIEW -


51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33
GND
52 53 54 55 56 57 58 59 60 61 62 63 64
GND
VDD 2 (+5V)
32 31 30 29 28 27 26 25 24 23 22 21 20
VDD1 (+5V)
GND
GND
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19


52 SY1
53 SY2
18 PH0
19 PH1
20 PH2
21 PH3
22 PH4
27 PH5
28 PH6
29 PH7
30 PH8
31 PH9
32 PH10
15 8FSC
33 NICK
38 CFI
34 SHIH
35 CFEN
36 CFIH
41 REFH
48 REFB
44 SCR
50 FLDI
39 DLH
40 ADH
46 DLB
47 ADB
49 LALTI
51 RSIH
55 PDIH
56 HCK
2 TES1
14 M1
16 M2
17 M3
45 M5
37 M6
VR 1
HR 62
GH 61
CP1 59
CP2 60
FLDO 54
4FSC 9
FSC 8
FSCB 7
SCH 43
CNTH 63
NIO 4
RZ1 6
RZ2 5
LALT 13
WIN 12
ADV 11
BPHN 23
BPHP 24
SABS 64
CFIV 3


SY1 52
SYNC WIDTH DET
SY2 53
FH CYCLE PULSE DET
FH WINDOW
RESET
PRESET PULSE GEN
NOISE ELMINATOR
d/dt
59 CP1
60 CP2
62 HR
61 GH
17 M3
HCK 56
908,909,910 1135COUNTER
63 CNTH
M1 30
M2 32
FIELD DET
54 FLDO
V SYNC DET
1 VR
8FSC 15
÷8 PHASE SHIFT
9 4FSC
8 FSC
7 FSCB
SCR 44
RSIH 51
49 LALTI
REFH 41
COLOR FRAME DET
4 NIO
34 SHIN
35 CFEN
36 CF IH
CFI 38
RESET PULSE GEN
1/2fsc SHIFT
CF INV DET
3 CF IV
11 PHO~PH10
SC
RZ GEN
909,910 1135COUNTER
6 RZ1
45 M5
37 M6
5 RZ2
NICK 33
FLDI 50
DLH 39
ADH 40
REFB 48
SCH DET
43 SCH
12 WIN
11 ADV
ADB 47
DLB 46
BURST GATE
PHASE DET
23 BPHN
24 BPHP
PDIH 55
LALT GEN
FSCB
13 LALT
TES1 2
14 SABS

PIN NO.	SIGNAL	DESCRIPTION
1.	VR out	**V SYNC PULSE output** VR is derived from the SY1(pin 52) input.
2.	TES1 in	**TEST MODE input**

TES1	MODE
0	TEST
(1)	NORMAL

0 : Low level
(0): Low level or open
1 : High level
(1): High level or open

PIN NO.	SIGNAL	DESCRIPTION
3.	CFIV out	**TEST SIGNAL output**
4.	NIO out	**1/2 NI CLOCK output** The frequency of NIO is a half of the NICK(pin 33) input.
5.	RZ2 out	**READ ZERO 2 output** RZ2 is derived from the REFH(pin 41) input and shows the starting timing of each line.
6.	RZ1 out	**READ ZERO 1 output** RZ1 is derived from RZ2(pin 5). RZ1 is delayed by PH0 to PH10 inputs. See the description of the PH0(pin 18)input.
7.	FSCB out	**FSCB PULSE output** FSCB is derived from FSC(pin 8) and its phase is shifted by the LALTI(pin 49) input. The amount of shift is one clock length of the 4FSC (pin-9) input.
8.	FSC out	**FSC CLOCK output**
9.	4FSC out	**4FSC CLOCK output** These are derived from the 8FSC(pin 15) input.
10.	GND	**GND**
11.	ADV out	**SC-H ADVANCE output**
12.	WIN out	**SC-H IN PHASE output** These signals shows the SC-H phase. See the description of the DLH(pin 39) input.
13.	LALT out	**PAL PULSE output** The LALT output is derived from the REFB(pin 48) burst signal in the pal system.

14. M1 in **HCK FREQUENCY SELECT input**
Set M1 and M2(pin 16) as follows according as the frequency of the HCK(pin 56) input.

FREQ. OF HCK	M1	M2
908 FH	0	0
910 FH	0	(1)
909 FH	(1)	0
1135 FH	(1)	(1)

FH: Frequency of the H sync signal that composes the SY2(pin 53) input.

15. 8FSC in **8FSC CLOCK input**
The rising edge is active.
4FSC(pin 9), FSC(pin 8) and FSCB(pin 7) are derived from 8FSC.

16. M2 in **HCK FREQUENCY SELECT input**
See the description of the M1(pin 14) input.

17. M3 in **NOISE ELIMINATOR ON/OFF SELECT input**
M3 sets the noise eliminator for the GH(pin 61) output derived from the SY2(pin 53) input on or off.

M3	NOISE ELIMINATION
0	OFF
(1)	ON

18. PH0 in **DELAY CONTROL INPUT FOR RZ1**
19. PH1 in **DELAY CONTROL INPUT FOR RZ1**
20. PH2 in **DELAY CONTROL INPUT FOR RZ1**
21. PH3 in **DELAY CONTROL INPUT FOR RZ1**
22. PH4 in **DELAY CONTROL INPUT FOR RZ1**
These inputs control the delay time of the RZ1 (pin 6) output as follows:

PH10 to PH0 INPUTS							DELAY TIME OF RZ1
10	9	8	--	2	1	0	
0	0	0	--	0	0	0	1/(4 Fsc) x 2047
0	0	0	--	0	0	1	1/(4 Fsc) x 2046
0	0	0	--	0	1	0	1/(4 Fsc) x 2045
0	0	0	--	0	1	1	1/(4 Fsc) x 2044
- - - - - - - - - - -							- - - - - - - - - -
1	1	1	--	1	0	0	1/(4 Fsc) x 3
1	1	1	--	1	0	1	1/(4 Fsc) x 2
1	1	1	--	1	1	0	1/(4 Fsc) x 1
1	1	1	--	1	1	1	1/(4 Fsc) x 0

23. BPHN out **BURST PHASE-N output**
24. BPHP out **BURST PHASE-P output**
These are the outputs of the phase comparator between the DLB(pin 46)/ADB(pin 47) inputs and the internal SC that is equivalent to the FSCB (pin 7) output.
The PDIH(pin 55) input inhibits the BPHN and BPHP outputs.

PDIH	BPHN/BPHP OUTPUTS
(0)	INHIBIT
1	ENABLE

25. GND **GND**
26. VDD1 **+5V input**

27. PH5 in **DELAY CONTROL INPUT FOR RZ1**
28. PH6 in **DELAY CONTROL INPUT FOR RZ1**
29. PH7 in **DELAY CONTROL INPUT FOR RZ1**
30. PH8 in **DELAY CONTROL INPUT FOR RZ1**
31. PH9 in **DELAY CONTROL INPUT FOR RZ1**
32. PH10 in **DELAY CONTROL INPUT FOR RZ1**
These inputs control the delay time of the RZ1 (pin 6) output. See the description of PH0(pin 18) input.

33. NICK in **NI CLOCK input**
NICK is the clock pulse to generate the NI (normal/invert) pulse to be used internally.
Usually, CNTH(pin 63) for the NTSC system or LALT(pin 13) for the PAL system is input to this terminal.
The rising edge is active.

34. SHIH in **MODE SELECT (COLOR FRAMING DET./RZ GEN) input**
35. CFEN in **MODE SELECT (COLOR FRAMING DET./RZ GEN) input**
36. CFIH in **MODE SELECT (COLOR FRAMING DET./RZ GEN) input**
These inputs set CXD1312Q to the color framing detector mode or the read zero generator mode as follows:

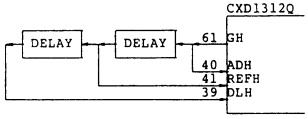
SHIH	CFEN	CFIH	MODE
0	(0)	1	COLOR FRAMING DETECTOR
(1)	(0)	(0)	RZ GENERATOR

37. M6 in **SIGNAL SYSTEM SELECT input**
Set M5(pin 45) and M6 as follows according as the video signal to be used.

MODE & VIDEO SIGNAL	M5	M6
TEST	0	0
4FSC/FH=909 : PALM	0	(1)
4FSC/FH=910 : NTSC	(1)	0
4FSC/FH=1135: PAL	(1)	(1)

38. CFI in **COLOR FRAME PULSE input**
This pulse is used for resetting the internal LALT signal in the RZ GENERATOR mode.

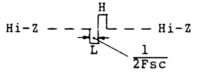
39. DLH in **DELAY H input**
40. ADH in **ADVANCE H input**
These H signals are used for the SC-H phase detection. The SC-H phase detector outputs ADV(pin 11) and WIN(pin 12) according as the phase relation between DLH/ADH and the internal SC that is equivalent to FSC(pin 8).
If the internal SC is between ADH and DLH, the WIN output goes to LOW.
If the internal SC is in advance of ADH, the ADV output goes to LOW.
The usual connection is as follows:



41. REFH in **REFERENCE H PULSE input**
REFH is used for the color framing detector and the RZ generator. GH(pin 61) or HR(pin 62) is usually input to this terminal.

42. GND **GND**

43. SCH out **SC-H PHASE output**
This signal shows the phase difference between REFH(pin 41) and internal SC. When they are in phase, the SCH output is as folows:

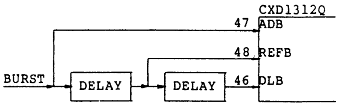


44. SCR in **DIRECT RESET INPUT FOR DIVIDE-BY-8 COUNTER**
This signal resets the divide-by-8 counter of 8FSC(pin 15) input directly.

SCR	DIVIDE-BY-8 COUNTER
(0)	RESET
1	COUNT

45. M5 in **SIGNAL SYSTEM SELECT input**
See the description of the M6(pin 37) input.

46. DLB in **DELAY BURST input**
47. ADB in **ADVANCE BURST input**
These burst signals are used for phase comparison with the internal SC.
The usual connection is as follows:



48. REFB in **REFERENCE BURST input**
REFB is used for resetting the divide-by-8 counter. RSIH(pin 51) inhibits the resetting as follows:

RSIH	RESET BY BY REFB
(0)	INHIBIT
1	ENABLE

49. LALTI in **PAL PULSE input**
The PAL pulse should be input to this terminal for the PAL system, but this terminal should be kept open for the NTSC system.

50. FLDI in **PAL FIELD PULSE input**
Phase alternating pulse by field.
The FLDO(pin 54) output is usually input to this terminal for the PAL system, but this terminal should be kept open for the NTSC system.

51. RSIH in **RESET INHIBIT input**
This signal inhibits for the REFB(pin 48) input to reset the divide-by-8 counter of 8FSC(pin 15) input.
See the description of the REFB(pin 48) input.

52. SY1 in **ROUGH SYNC PULSE input (negative pulse)**
VR(pin 1), CP1(pin 59), CP2(pin 60) and the internal gate pulse are derived from SY1.

53. SY2 in **SYNC PULSE input (negative pulse)**
This sync pulse generates GH(pin 61), and GH is input to the SC-H phase detection circuit. See the description of DLH(pin 39) and ADH(pin 40).

54. FLDO out **FIELD PULSE output**
Phase altering pulse by field.

55. PDIH in **BPHN/BPHP OUTPUT INHIBIT input**
This signal inhibits the BPHN(pin 23) and BPHP (pin 24) outputs. See the description of BPHN and BPHP.

56. HCK in **nH CLOCK input**
The frequency of the HCK input has the specified relation with that of the H sync signal that composes the SY2(pin 53) input. See the description of the M1(pin 14) input.

57. GND **GND**
58. VDD2 **+5V input**

59. CP1 out **LEADING EDGE OF SY1(pin 52) output**
60. CP2 out **TRAILING EDGE OF SY1(pin 52) output**

61. GH out **GATED H PULSE output**
62. HR out **H PULSE output**
GH and HR are derived from the SY2(pin 53) sync pulse input. Both signals consist of H pulses but not of a half H pulse.
GH is processed by the noise eliminator and loses nine pulses in the V sync interval.

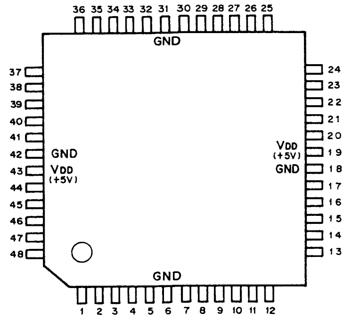
63. CNTH out **COUNT H output**
CNTH is a H pulse signal that is divided from the HCK(pin 56) input. The divider is reset by the SY1(pin 52) input.
See the description of the M1(pin 14) input.

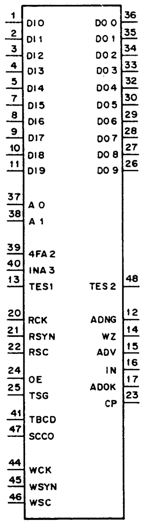
64. SABS out **TEST output**

CXD1319AQ (SONY)

C-MOS VIDEO BUFFER MEMORY

- TOP VIEW -

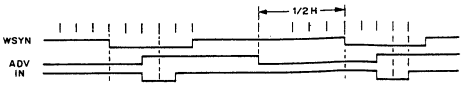

36 35 34 33 32 31 30 29 28 27 26 25
GND
37 38 39 40 41 42 43 44 45 46 47 48
GND
VDD (+5V)
VDD (+5V)
GND
24 23 22 21 20 19 18 17 16 15 14 13
GND
1 2 3 4 5 6 7 8 9 10 11 12


1 DI0
2 DI1
3 DI2
4 DI3
5 DI4
7 DI5
8 DI6
9 DI7
10 DI8
11 DI9
37 A0
38 A1
39 4FA2
40 INA3
13 TES1
20 RCK
21 RSYN
22 RSC
24 OE
25 TSG
41 TBCD
47 SCCO
44 WCK
45 WSYN
46 WSC
DO0 36
DO1 35
DO2 34
DO3 33
DO4 32
DO5 30
DO6 29
DO7 28
DO8 27
DO9 26
TES2 48
ADNG 12
WZ 14
ADV 15
IN 16
ADOK 17
CP 23

PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL
1	○		DI0	13	○		TES1	25	○		TSG	37	○		A0
2	○		DI1	14		○	WZ	26		○	DO9	38	○		A1
3	○		DI2	15		○	ADV	27		○	DO8	39	○		4FA2
4	○		DI3	16		○	IN	28		○	DO7	40	○		INA3
5	○		DI4	17		○	ADOK	29		○	DO6	41	○		TBCD
6			GND	18			GND	30		○	DO5	42			GND
7	○		DI5	19			VDD(+5V)	31			GND	43			VDD(+5V)
8	○		DI6	20	○		RCK	32		○	DO4	44	○		WCK
9	○		DI7	21	○		RSYN	33		○	DO3	45	○		WSYN
10	○		DI8	22	○		RSC	34		○	DO2	46	○		WSC
11	○		DI9	23		○	CP	35		○	DO1	47	○		SCCO
12		○	ADNG	24	○		OE	36		○	DO0	48		○	TES2

INPUT
DI0-DI9; DATA INPUT
TES; TEST
RCK; READ CLOCK INPUT (REFERENCE)
RSYN; READ SYNC INPUT (REFERENCE)
RSC; READ SUB CARRIER INPUT (REFERENCE)
OE; ENABLE OUTPUT (L; OUTPUT/H; HIGH IMPEDANCE)
TSG; TSG MODE APPOINT (L; TSG/H; TBC OR DL MODE)
A0; DL MODE OF DELAY TIME APPOINT
A1; DL MODE: DELAY TIME APPOINT/TBC MODE: 2fH GATE ON, OFF APPOINT (H; ON/L; OFF)
4FA2; DL MODE: DELAY TIME APPOINT/TBC MODE: INPUT PULSE FORMAT APPOINT (H; 4Fsc/L; 4:2:2)
INA3; DL MODE: DELAY TIME APPOINT/TBC MODE: H SYNC DETECT (H; INT/L; EXT)
TBCD; TBC/DL MODE SELECT (H; TBC/L; DL) (TSG LOW; TSG MODE)
WCK; WRITE CLOCK INPUT
WSYN; EXT MODE OF WRITE H SYNC INPUT (INT MODE; NC)
WSC; EXT MODE OF SUB CARRIER INPUT
SCCO; 4Fsc MODE SC OF PHASE ADJUST ONLY: L

OUTPUT
DO0-DO9; DATA OUTPUT
ADNG; TBC UNSTABILIZED; L (READ WRITE 7+1CLOCK)
WZ; VIDEO DATA OUTPUT OF ABSOLUTE PHASE
ADV, IN; WRITE/READ H SYNC OF RELATION

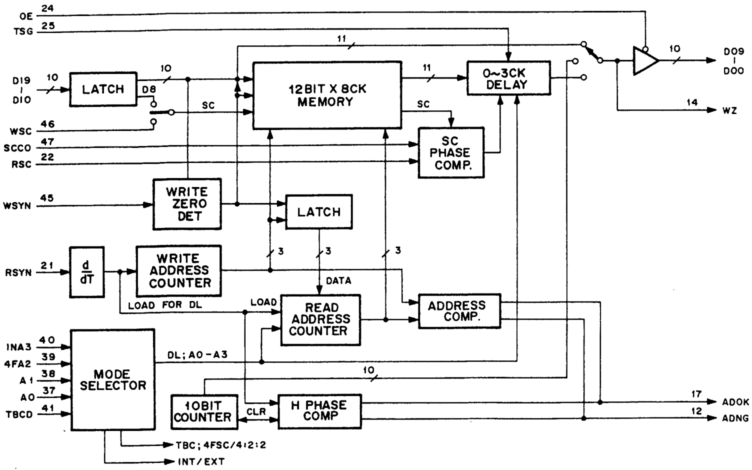

1/2H
WSYN
ADV
IN

ADOK; TBC STABILIZED; L (READ WRITE 3+1 CLOCK)
CP;

TBCD	4FA2	SCCO	INA3	CP OUTPUT
0	X	0	X	INT13 SYNC+EXT SYNC
0	X	1	X	INT14 SYNC+EXT SYNC
1	0	X	1	INT13 SYNC+EXT SYNC
1	1	X	1	INT14 SYNC EXT SYNC
1	X	X	0	EXT SYNC

0; LOW LEVEL
1; HIGH LEVEL
X; DONT CARE

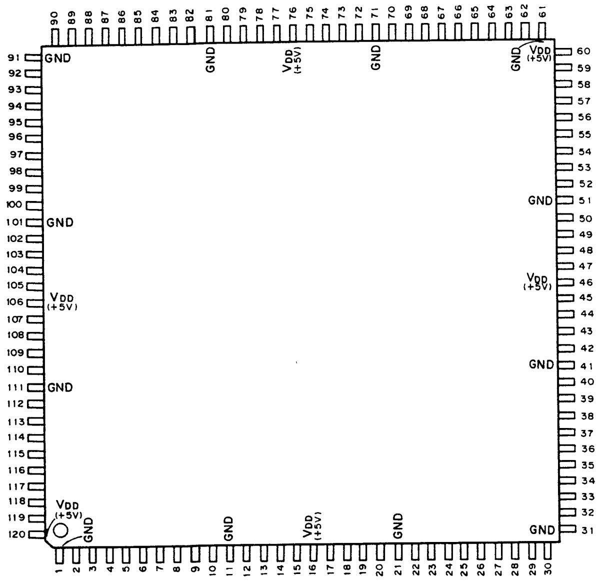
INT13 SYNC; D2-D9 DETECTED 13.5M FORMAT SYNC
INT14 SYNC; D2-D9 DETECTED 14.3M FORMAT SYNC
EXT SYNC; INPUT SYNC FROM WSYN (45PIN)

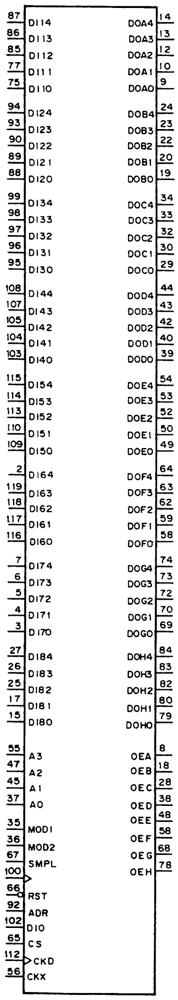

OE 24
TSG 25
DI9 DI0 10
LATCH
D8
10
SC
12BIT X 8CK MEMORY
11
11
0~3CK DELAY
SC
10
DO9 DO0
14
WZ
WSC 46
SCCO 47
RSC 22
SC PHASE COMP.
WSYN 45
WRITE ZERO DET
LATCH
RSYN 21
d/dT
WRITE ADDRESS COUNTER
3
3
3
DATA
LOAD FOR DL
LOAD
READ ADDRESS COUNTER
ADDRESS COMP.
INA3 40
4FA2 39
A1 38
A0 37
TBCD 41
MODE SELECTOR
DL; A0-A3
10
10BIT COUNTER
CLR
H PHASE COMP
17 ADOK
12 ADNG
TBC; 4FSC/4:2:2
INT/EXT

CXD8026Q (SONY) FLAT PACKAGE

C-MOS 8x8 CHANNEL DIGITAL PARALLEL MATRIX SWITCHER (5BIT)

– TOP VIEW –


GND
VDD (+5V)
1–120


DI10–DI14
DI20–DI24
DI30–DI34
DI40–DI44
DI50–DI54
DI60–DI64
DI70–DI74
DI80–DI84
A0–A3
MOD1
MOD2
SMPL
RST
ADR
DIO
CS
CKD
CKX
DOA0–DOA4
DOB0–DOB4
DOC0–DOC4
DOD0–DOD4
DOE0–DOE4
DOF0–DOF4
DOG0–DOG4
DOH0–DOH4
OEA–OEH

INPUTS

A0 – A3 ; CHIP ADDRESS CONTROL
ADR ; ADDRESS
CK ; SYSTEM CLOCK
CKD ; SERIAL INTERFACE CLOCK
CKX ; SWITCHING TIMING PULSE
CS ; CHIP SELECT
DI10 – DI14 ; 5 BIT DIGITAL IN (CH1)
DI20 – DI24 ; 5 BIT DIGITAL IN (CH2)
DI30 – DI34 ; 5 BIT DIGITAL IN (CH3)
DI40 – DI44 ; 5 BIT DIGITAL IN (CH4)
DI50 – DI54 ; 5 BIT DIGITAL IN (CH5)
DI60 – DI64 ; 5 BIT DIGITAL IN (CH6)
DI70 – DI74 ; 5 BIT DIGITAL IN (CH7)
DI80 – DI84 ; 5 BIT DIGITAL IN (CH8)
MOD1 ; MODE 1 SELECT (L : LSB 5 BIT H : MSB 5 BIT)
MOD2 ; MODE 2 SELECT (D1 MODE : 13.5 MHz CLOCK INPUT)
RST ; RESET PULSE
SMPL ; SAMPL PULSE

OUTPUTS

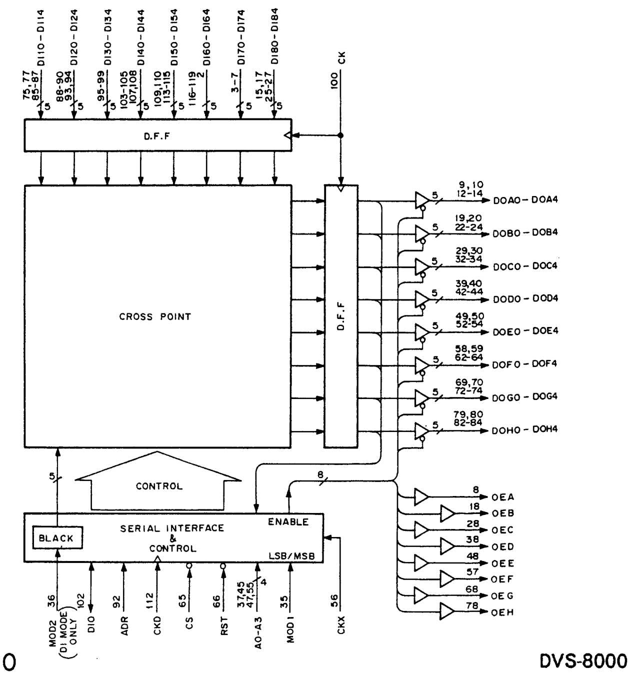
DOA0 – DOA4 ; 5 BIT DIGITAL OUT (CHA)
DOB0 – DOB4 ; 5 BIT DIGITAL OUT (CHB)
DOC0 – DOC4 ; 5 BIT DIGITAL OUT (CHC)
DOD0 – DOD4 ; 5 BIT DIGITAL OUT (CHD)
DOE0 – DOE4 ; 5 BIT DIGITAL OUT (CHE)
DOF0 – DOF4 ; 5 BIT DIGITAL OUT (CHF)
DOG0 – DOG4 ; 5 BIT DIGITAL OUT (CHG)
DOH0 – DOH4 ; 5 BIT DIGITAL OUT (CHH)
OEA – OEH ; ENABLE OUT FOR CHA – CHH

INPUT/OUTPUT

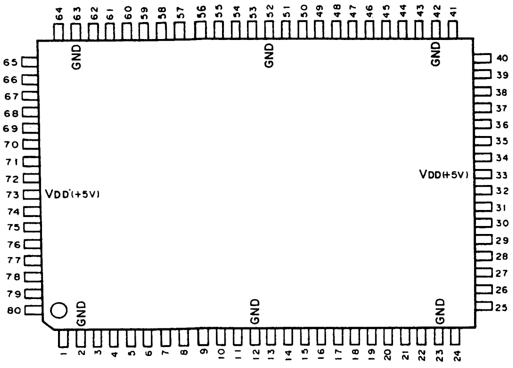
DIO ; SERIAL DATA

(VDD = + 5V)

PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL
1	–	GND	31	–	GND	61	–	GND	91	–	GND
2	I	DI64	32	O	DOC2	62	O	DOF2	92	I	ADR
3	I	DI70	33	O	DOC3	63	O	DOF3	93	I	DI23
4	I	DI71	34	O	DOC4	64	O	DOF4	94	I	DI24
5	I	DI72	35	I	MOD1	65	I	CS	95	I	DI30
6	I	DI73	36	I	MOD2	66	I	RST	96	I	DI31
7	I	DI74	37	I	A0	67	I	SMPL	97	I	DI32
8	O	OEA	38	O	OED	68	O	OEG	98	I	DI33
9	O	DOA0	39	O	DOD0	69	O	DOG0	99	I	DI34
10	O	DOA1	40	O	DOD1	70	O	DOG1	100	I	CK
11	–	GND	41	–	GND	71	–	GND	101	–	GND
12	O	DOA2	42	O	DOD2	72	O	DOG2	102	I/O	DIO
13	O	DOA3	43	O	DOD3	73	O	DOG3	103	I	DI40
14	O	DOA4	44	O	DOD4	74	O	DOG4	104	I	DI41
15	I	DI80	45	I	A1	75	I	DI10	105	I	DI42
16	–	VDD	46	–	VDD	76	–	VDD	106	–	VDD
17	I	DI81	47	I	A2	77	I	DI11	107	I	DI43
18	O	OEB	48	O	OEE	78	O	OEH	108	I	DI44
19	O	DOB0	49	O	DOE0	79	O	DOH0	109	I	DI50
20	O	DOB1	50	O	DOE1	80	O	DOH1	110	I	DI51
21	–	GND	51	–	GND	81	–	GND	111	–	GND
22	O	DOB2	52	O	DOE2	82	O	DOH2	112	I	CKD
23	O	DOB3	53	O	DOE3	83	O	DOH3	113	I	DI52
24	O	DOB4	54	O	DOE4	84	O	DOH4	114	I	DI53
25	I	DI82	55	I	A3	85	I	DI12	115	I	DI54
26	I	DI83	56	I	CKX	86	I	DI13	116	I	DI60
27	I	DI84	57	O	OEF	87	I	DI14	117	I	DI61
28	O	OEC	58	O	DOF0	88	I	DI20	118	I	DI62
29	O	DOC0	59	O	DOF1	89	I	DI21	119	I	DI63
30	O	DOC1	60	–	VDD	90	I	DI22	120	–	VDD


DI10 – DI14
DI20 – DI24
DI30 – DI34
DI40 – DI44
DI50 – DI54
DI60 – DI64
DI70 – DI74
DI80 – DI84
CK
D.F.F
CROSS POINT
D.F.F
DOA0 – DOA4
DOB0 – DOB4
DOC0 – DOC4
DOD0 – DOD4
DOE0 – DOE4
DOF0 – DOF4
DOG0 – DOG4
DOH0 – DOH4
CONTROL
BLACK
SERIAL INTERFACE & CONTROL
ENABLE
LSB/MSB
OEA
OEB
OEC
OED
OEE
OEF
OEG
OEH
MOD2 (D1 MODE ONLY)
DIO
ADR
CKD
CS
RST
A0 – A3
MOD1
CKX

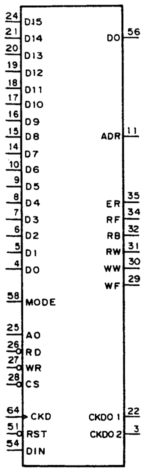
CXD8052Q (SONY) FLAT PACKAGE
C-MOS SERIAL CONTROLLER
– TOP VIEW –


64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80
40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
GND
GND
GND
VDD(+5V)
VDD(+5V)
GND
GND
GND

⟨CPU MODE⟩

(VDD = + 5V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	–	NC	21	I/O	D14	41	–	NC	61	–	NC
2	–	GND	22	O	CKDO1	42	–	GND	62	–	NC
3	O	CKDO2	23	–	GND	43	–	NC	63	–	GND
4	I/O	D0	24	I/O	D15	44	–	NC	64	I	CKD
5	I/O	D1	25	I/O	A0	45	–	NC	65	–	NC
6	I/O	D2	26	I/O	RD	46	–	NC	66	–	NC
7	I/O	D3	27	I/O	WR	47	–	NC	67	–	NC
8	I/O	D4	28	I/O	CS	48	–	NC	68	–	NC
9	I/O	D5	29	O	WF	49	–	NC	69	–	NC
10	I/O	D6	30	O	WW	50	–	NC	70	–	NC
11	O	ADR	31	O	RW	51	I	RST	71	–	NC
12	–	GND	32	O	RB	52	–	GND	72	–	NC
13	–	NC	33	–	VDD	53	–	NC	73	–	VDD
14	I/O	D7	34	O	RF	54	I	DIN	74	–	NC
15	I/O	D8	35	O	ER	55	–	NC	75	–	NC
16	I/O	D9	36	–	NC	56	O	DO	76	–	NC
17	I/O	D10	37	–	NC	57	–	NC	77	–	NC
18	I/O	D11	38	–	NC	58	I	MODE	78	–	NC
19	I/O	D12	39	–	NC	59	–	NC	79	–	NC
20	I/O	D13	40	–	NC	60	–	NC	80	–	NC

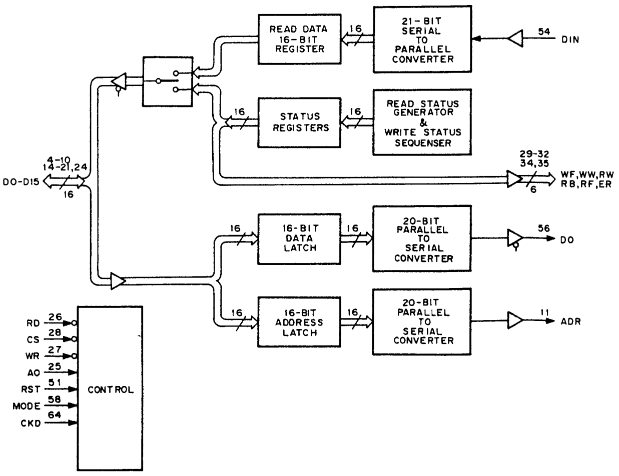

24 D15
21 D14
20 D13
19 D12
18 D11
17 D10
16 D9
15 D8
14 D7
10 D6
9 D5
8 D4
7 D3
6 D2
5 D1
4 D0
58 MODE
25 A0
26 RD
27 WR
28 CS
64 CKD
51 RST
54 DIN
DO 56
ADR 11
ER 35
RF 34
RB 32
RW 31
WW 30
WF 29
CKDO 1 22
CKDO 2 3

INPUT

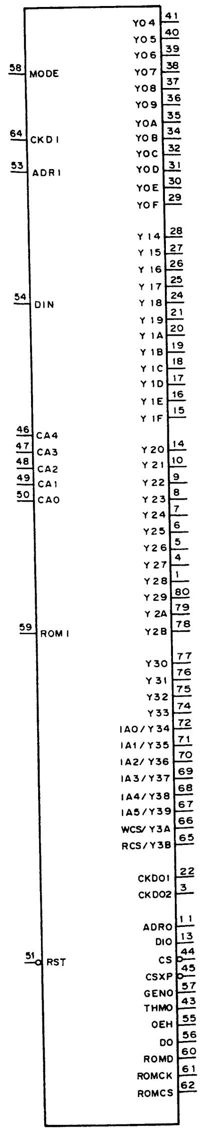
AO ; REGISTER SELECT
LOW : DATA REGISTER ACTIVE
HIGH : ADDRESS REGISTER ACTIVE
CKD ; SERIAL INTERFACE CLOCK
CS ; CHIP SELECT (LOW : ACTIVE)
DIN ; SERIAL DATA
MODE ; CPU /VIDEO BOARD MODE SELECT
LOW : CPU MODE
RD ; READ ENABLE (LOW : ACTIVE)
RST ; RESET PULSE
WR ; WRITE ENABLE (LOW : ACTIVE)

OUTPUT

ADR ; SERIAL ADDRESS
CKDO1,
CKDO2 ; SERIAL INTERFACE CLOCK
DO ; SERIAL DATA
ER ; READ ERROR (HIGH : ERROR)
RB ; READ BUSY (HIGH : BUSY)
RF ; READ BUFFER FULL OUT
HIGH : READ REGISTERS ARE FULL
LOW : READ REGISTERS ARE EMPTY
RW ; READ WINDOW
HIGH : READ DATA ARE RECEIVING AT DIN TERMINAL
WF ; WRITE BUFFER FULL OUT
HIGH : WRITE REGISTERS ARE FULL
LOW : WRITE REGISTERS ARE EMPTY
WW ; WRITE WINDOW
HIGH : SERIAL DATA OR ADDRESS ARE SENDING FROM D OUT
OR ADR (SERIAL ADDRESS) TERMINALS


READ DATA 16-BIT REGISTER
16
21-BIT SERIAL TO PARALLEL CONVERTER
54
DIN
16
STATUS REGISTERS
16
READ STATUS GENERATOR & WRITE STATUS SEQUENSER
4-10
14-21,24
D0-D15
16
29-32
34,35
WF,WW,RW
RB,RF,ER
6
16
16-BIT DATA LATCH
16
20-BIT PARALLEL TO SERIAL CONVERTER
56
DO
16
16-BIT ADDRESS LATCH
16
20-BIT PARALLEL TO SERIAL CONVERTER
11
ADR
RD 26
CS 28
WR 27
AO 25
RST 51
MODE 58
CKD 64
CONTROL

(VIDEO BOARD MODE)


58 MODE
64 CKDI
53 ADRI
54 DIN
46 CA4
47 CA3
48 CA2
49 CA1
50 CA0
59 ROMI
51 RST
Y04 41
Y05 40
Y06 39
Y07 38
Y08 37
Y09 36
Y0A 35
Y0B 34
Y0C 32
Y0D 31
Y0E 30
Y0F 29
Y14 28
Y15 27
Y16 26
Y17 25
Y18 24
Y19 21
Y1A 20
Y1B 19
Y1C 18
Y1D 17
Y1E 16
Y1F 15
Y20 14
Y21 10
Y22 9
Y23 8
Y24 7
Y25 6
Y26 5
Y27 4
Y28 1
Y29 80
Y2A 79
Y2B 78
Y30 77
Y31 76
Y32 75
Y33 74
IA0/Y34 72
IA1/Y35 71
IA2/Y36 70
IA3/Y37 69
IA4/Y38 68
IA5/Y39 67
WCS/Y3A 66
RCS/Y3B 65
CKDO1 22
CKDO2 3
ADRO 11
DIO 13
CS 44
CSXP 45
GENO 57
THMO 43
OEH 55
DO 56
ROMD 60
ROMCK 61
ROMCS 62

(V$_{DD}$ = + 5V)

PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL
1	O	Y28	21	I/O	Y19	41	O	Y04	61	O	ROMCK
2	–	GND	22	O	CKDO1	42	–	GND	62	O	ROMCS
3	O	CKDO2	23	–	GND	43	O	THMO	63	–	GND
4	I/O	Y27	24	I/O	Y18	44	O	CS	64	I	CKDI
5	I/O	Y26	25	I/O	Y17	45	O	CSXP	65	O	Y3B/RCS
6	I/O	Y25	26	I/O	Y16	46	I	CA4	66	O	Y3A/WCS
7	I/O	Y24	27	I/O	Y15	47	I	CA3	67	O	Y39/IA5
8	I/O	Y23	28	I/O	Y14	48	I	CA2	68	O	Y38/IA4
9	I/O	Y22	29	O	Y0F	49	I	CA1	69	O	Y37/IA3
10	I/O	Y21	30	O	Y0E	50	I	CA0	70	O	Y36/IA2
11	O	ADRO	31	O	Y0D	51	I	RST	71	O	Y35/IA1
12	–	GND	32	O	Y0C	52	–	GND	72	O	Y34/IA0
13	I/O	DIO	33	–	V$_{DD}$	53	I	ADRI	73	–	V$_{DD}$
14	I/O	Y20	34	O	Y0B	54	I	DIN	74	O	Y33
15	I/O	Y1F	35	O	Y0A	55	O	OEH	75	O	Y32
16	I/O	Y1E	36	O	Y09	56	O	DO	76	O	Y31
17	I/O	Y1D	37	O	Y08	57	O	GENO	77	O	Y30
18	I/O	Y1C	38	O	Y07	58	I	MODE	78	O	Y2B
19	I/O	Y1B	39	O	Y06	59	I	ROMI	79	O	Y2A
20	I/O	Y1A	40	O	Y05	60	O	ROMD	80	O	Y29

INPUT

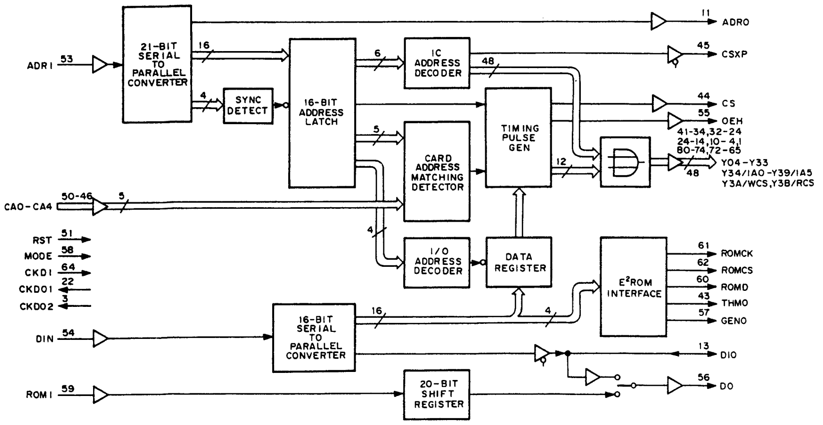
ADRI	; SERIAL ADDRESS
CA0 – CA4	; CARD ADDRESS (5 BIT)
CKDI	; SERIAL INTERFACE CLOCK
DIN	; SERIAL DATA
MODE	; CPU /VIDEO BOARD MODE SELECT H : VIDEO MODE
ROMI	; READ DATA IN FOR E^{2}PROM
RST	; RESET PULSE (L : RESET)

OUTPUT

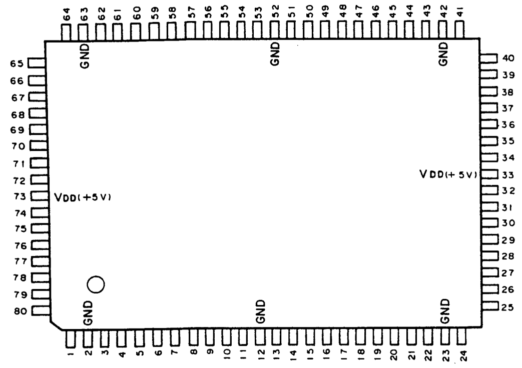
ADRO	; SERIAL ADDRESS
CKDO1, CKDO2	; SERIAL INTERFACE CLOCK
CSXP	; CHIP SELECT OUT FOR 20 BIT CROSS POINT ICS
DO	; SERIAL DATA
GENO	; UNIVERSAL CONTROL
OEH	; ENABLE OUT FOR DRIVER
ROM CK	; CLOCK OUT FOR E^{2}PROM
ROM CS	; CHIP SELECT OUT FOR E^{2}PROM
ROMD	; WRITE DATA OUT FOR E^{2}PROM
THMO	; THERMISTOR CONTROL
Y04 – Y3B	; IC ADDRESS DECODER

INPUT/OUTPUT

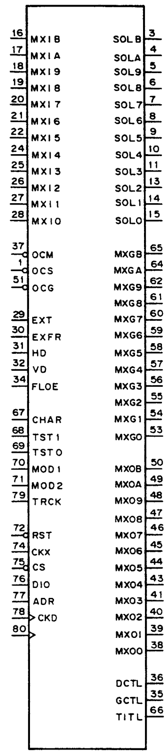
DIO	; SERIAL DATA


ADRI 53
21-BIT SERIAL TO PARALLEL CONVERTER
16
4
SYNC DETECT
16-BIT ADDRESS LATCH
6
IC ADDRESS DECODER
48
5
CARD ADDRESS MATCHING DETECTOR
TIMING PULSE GEN
12
4
I/O ADDRESS DECODER
DATA REGISTER
E²ROM INTERFACE
16-BIT SERIAL TO PARALLEL CONVERTER
20-BIT SHIFT REGISTER
CA0-CA4 50-46 5
RST 51
MODE 58
CKDI 64
CKDO1 22
CKDO2 3
DIN 54
ROMI 59
11 ADRO
45 CSXP
44 CS
55 OEH
41-34,32-24
24-14,10-4,1
80-74,72-65
48
Y04-Y33
Y34/IA0-Y39/IA5
Y3A/WCS,Y3B/RCS
61 ROMCK
62 ROMCS
60 ROMD
43 THMO
57 GENO
13 DIO
56 DO

CXD8053Q (SONY) FLAT PACKAGE
C-MOS BOX GENERATOR
– TOP VIEW –


GND
GND
GND
VDD(+5V)
VDD(+5V)
GND
GND
GND
1–24
25–40
41–64
65–80

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	OCS	21	I	MXI6	41	O	MXO3	61	O	MXG8
2	–	GND	22	I	MXI5	42	–	GND	62	O	MXG9
3	O	SOLB	23	–	-GND	43	O	MXO4	63	–	GND
4	O	SOLA	24	I	MXI4	44	O	MXO5	64	O	MXGA
5	O	SOL9	25	I	MXI3	45	O	MXO6	65	O	MXGB
6	O	SOL8	26	I	MXI2	46	O	MXO7	66	O	TITL
7	O	SOL7	27	I	MXI1	47	O	MXO8	67	I	CHAR
8	O	SOL6	28	I	MXI0	48	O	MXO9	68	I	TST1
9	O	SOL5	29	I	EXT	49	O	MXOA	69	I	TST0
10	O	SOL4	30	I	EXFR	50	O	MXOB	70	I	MOD1
11	O	SOL3	31	I	HD	51	I	OCG	71	I	MOD0
12	–	GND	32	I	VD	52	–	GND	72	I	RST
13	O	SOL2	33	–	VDD	53	O	MXG0	73	–	VDD
14	O	SOL1	34	I	FLOE	54	O	MXG1	74	I	CKX
15	O	SOL0	35	O	GCTL	55	O	MXG2	75	I	CS
16	I	MXIB	36	O	DCTL	56	O	MXG3	76	I/O	DIO
17	I	MXIA	37	I	OCM	57	O	MXG4	77	I	ADR
18	I	MXI9	38	O	MXO0	58	O	MXG5	78	I	CKD
19	I	MXI8	39	O	MXO1	59	O	MXG6	79	I	TRCK
20	I	MXI7	40	O	MXO2	60	O	MXG7	80	I	CK


16 MXIB
17 MXIA
18 MXI9
19 MXI8
20 MXI7
21 MXI6
22 MXI5
24 MXI4
25 MXI3
26 MXI2
27 MXI1
28 MXI0
37 OCM
1 OCS
51 OCG
29 EXT
30 EXFR
31 HD
32 VD
34 FLOE
67 CHAR
68 TST1
69 TST0
70 MOD1
71 MOD2
79 TRCK
72 RST
74 CKX
75 CS
76 DIO
77 ADR
78 CKD
80
SOLB 3
SOLA 4
SOL9 5
SOL8 6
SOL7 7
SOL6 8
SOL5 9
SOL4 10
SOL3 11
SOL2 13
SOL1 14
SOL0 15
MXGB 65
MXGA 64
MXG9 62
MXG8 61
MXG7 60
MXG6 59
MXG5 58
MXG4 57
MXG3 56
MXG2 55
MXG1 54
MXG0 53
MXOB 50
MXOA 49
MXO9 48
MXO8 47
MXO7 46
MXO6 45
MXO5 44
MXO4 43
MXO3 41
MXO2 40
MXO1 39
MXO0 38
DCTL 36
GCTL 35
TITL 66

INPUT

ADR ; SERIAL ADDRESS
CHAR ; CHARACTER
CK ; SYSTEM CLOCK (MAX. 20MHz)
CKD ; SERIAL INTERFACE CLOCK
CKX ; SWITCHING TIMING PULSE (HIGH ACTIVE)
CS ; CHIP SELECT
EXFR ; EXTERNAL FRINGE PULSE
EXT ; EXTERNAL FRINGE MODE
FLOE ; FIELD ODD/EVEN
HD ; HORIZONTAL DRIVE PULSE
MIXB – MIX0 ;

MODE 0	NOT USED
MODE 1	VIDEO DATA
MODE 2	MULTIPLEXED SINE DATA
MODE 3	

MOD1, 2 ; MODE SET

MOD1	MOD0	MODE	FUNCTION
0	0	MODE 0	BOX MASK SOLID GENERATOR
	1	MODE 1	SAFE TITLE GENERATOR /INSERTER
1	0	MODE 2	WIPE FRINGE MODULATION OSCILLATOR
	1	MODE 3	WIPE H-V MODULATION OSCILLATOR

0 : LOW LEVEL, 1 : HIGH LEVEL

OCG ; OUTPUT ENABLE OF MXGB – MXG0 (LOW : ENABLE)
OCM ; OUTPUT ENABLE OF MXOB – MXO0 (LOW : ENABLE)
OCS ; OUTPUT ENABLE OF SOLB – SOL0 (LOW : ENABLE)
RST ; SERIAL CONTROL RESET
TRCK ; FRINGE DATA READ PULSE
TST0 ; OUTPUT SWITCH
TST1 ; TEST/$\overline{\text{NORMAL}}$
VD ; VERTICAL DRIVE PULSE

OUTPUT

DCTL ; MXO OUT CONTROL PULSE
GCTL ; MXG OUT CONTROL PULSE
MXGB – MXG0 ;

MODE 0	COUNTER OUTPUT
MODE 1	COUNTER OUTPUT
MODE 2	FRINGE MOD. GAIN
MODE 3	H-V MOD. MULTIPLEXED GAIN

MXOB – MXO0 ;

MODE 0	SOLID DATA
MODE 1	SOLID DATA
MODE 2	FRINGE MOD. ADDRESS
MODE 3	H-V MOD. MULTIPLEXED ADDRESS

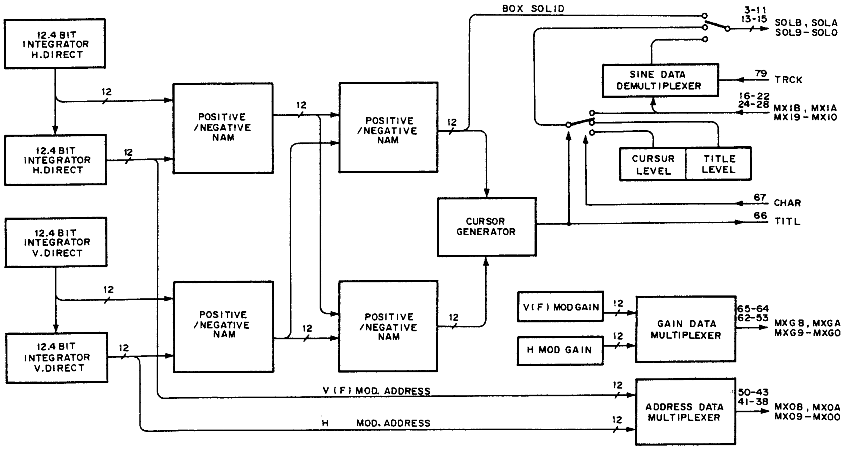
SOLB – SOL0 ;

MODE 0	SOLID DATA
MODE 1	SAFETITLED DATA
MODE 2	FRINGE DATA
MODE 3	H MOD. DATA

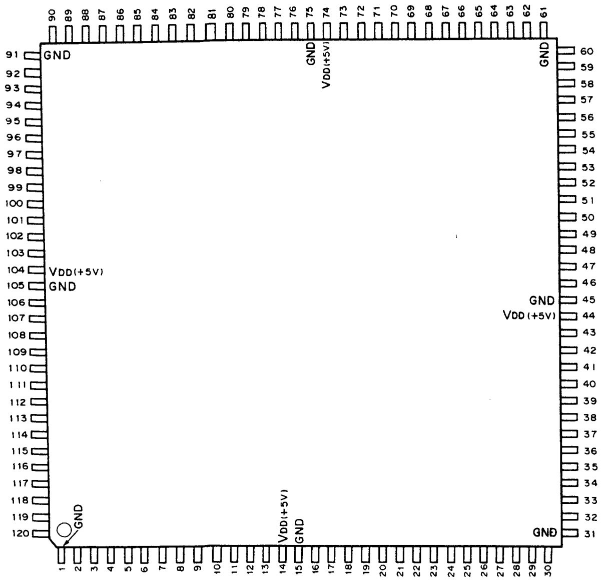
TITL ; SAFE TITLE

INPUT/OUTPUT

DIO ; SERIAL DATA


12.4 BIT INTEGRATOR H.DIRECT
12.4 BIT INTEGRATOR H.DIRECT
12.4 BIT INTEGRATOR V.DIRECT
12.4 BIT INTEGRATOR V.DIRECT
POSITIVE /NEGATIVE NAM
POSITIVE /NEGATIVE NAM
POSITIVE /NEGATIVE NAM
POSITIVE /NEGATIVE NAM
12
CURSOR GENERATOR
BOX SOLID
3-11
13-15
SOLB, SOLA
SOL9 – SOL0
SINE DATA DEMULTIPLEXER
79 TRCK
16-22
24-28
MXIB, MXIA
MXI9 – MXI0
CURSUR LEVEL
TITLE LEVEL
67 CHAR
66 TITL
V(F) MODGAIN
H MOD GAIN
GAIN DATA MULTIPLEXER
65-64
62-53
MXGB, MXGA
MXG9 – MXG0
V(F) MOD. ADDRESS
H MOD. ADDRESS
ADDRESS DATA MULTIPLEXER
50-43
41-38
MXOB, MXOA
MXO9 – MXO0

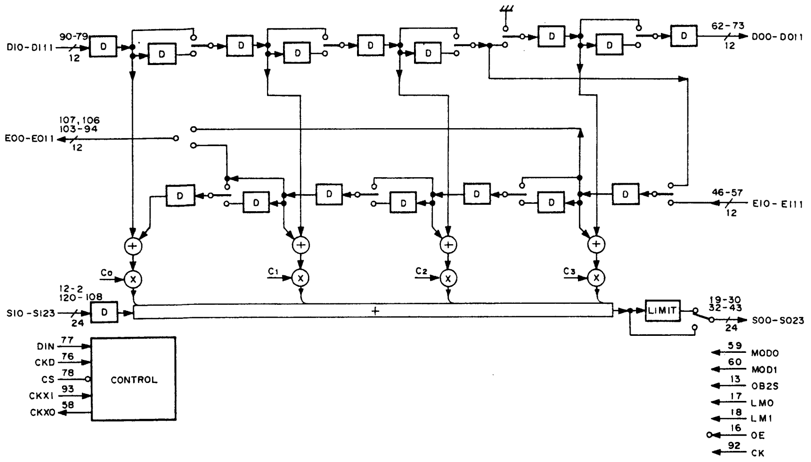
CXD8055Q (SONY) FLAT PACKAGE
C-MOS DIGITAL FILTER
– TOP VIEW –



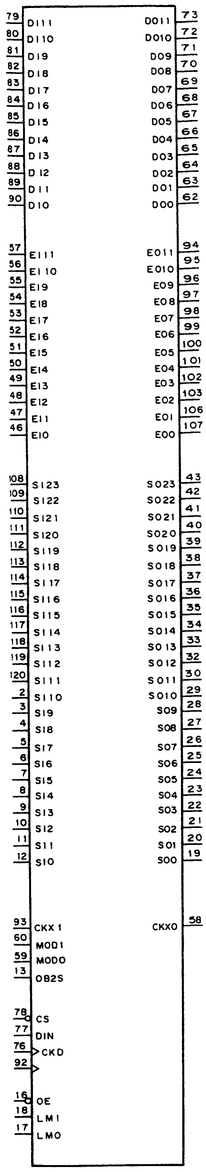
GND
GND
VDD(+5V)
GND
VDD(+5V)
GND
GND
VDD(+5V)
GND
VDD(+5V)
GND
GND

(VDD = + 5V)

PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL
1	–	GND	31	–	GND	61	–	GND	91	–	GND
2	I	SI10	32	O	SO12	62	O	DO0	92	I	CK
3	I	SI9	33	O	SO13	63	O	DO1	93	I	CKXI
4	I	SI8	34	O	SO14	64	O	DO2	94	O	EO11
5	I	SI7	35	O	SO15	65	O	DO3	95	O	EO10
6	I	SI6	36	O	SO16	66	O	DO4	96	O	EO9
7	I	SI5	37	O	SO17	67	O	DO5	97	O	EO8
8	I	SI4	38	O	SO18	68	O	DO6	98	O	EO7
9	I	SI3	39	O	SO19	69	O	DO7	99	O	EO6
10	I	SI2	40	O	SO20	70	O	DO8	100	O	EO5
11	I	SI1	41	O	SO21	71	O	DO9	101	O	EO4
12	I	SI0	42	O	SO22	72	O	DO10	102	O	EO3
13	I	OB2S	43	O	SO23	73	O	DO11	103	O	EO2
14	–	VDD	44	–	VDD	74	–	VDD	104	–	VDD
15	–	GND	45	–	GND	75	–	GND	105	–	GND
16	I	OE	46	I	EI0	76	I	CKD	106	O	EO1
17	I	LM0	47	I	EI1	77	I	DIN	107	O	EO0
18	I	LM1	48	I	EI2	78	I	CS	108	I	SI23
19	O	SO0	49	I	EI3	79	I	DI11	109	I	SI22
20	O	SO1	50	I	EI4	80	I	DI10	110	I	SI21
21	O	SO2	51	I	EI5	81	I	DI9	111	I	SI20
22	O	SO3	52	I	EI6	82	I	DI8	112	I	SI19
23	O	SO4	53	I	EI7	83	I	DI7	113	I	SI18
24	O	SO5	54	I	EI8	84	I	DI6	114	I	SI17
25	O	SO6	55	I	EI9	85	I	DI5	115	I	SI16
26	O	SO7	56	I	EI10	86	I	DI4	116	I	SI15
27	O	SO8	57	I	EI11	87	I	DI3	117	I	SI14
28	O	SO9	58	O	CKXO	88	I	DI2	118	I	SI13
29	O	SO10	59	I	MOD0	89	I	DI1	119	I	SI12
30	O	SO11	60	I	MOD1	90	I	DI0	120	I	SI11



DI0-DI11
90-79
12
D
62-73
12
DO0-DO11
107,106
103-94
EO0-EO11
12
46-57
EI0-EI11
12
C0
C1
C2
C3
12-2
120-108
SI0-SI23
24
+
LIMIT
19-30
32-43
SO0-SO23
24
DIN 77
CKD 76
CS 78
CKXI 93
CKXO 58
CONTROL
59 MOD0
60 MOD1
13 OB2S
17 LM0
18 LM1
16 OE
92 CK


79 DI11
80 DI10
81 DI9
82 DI8
83 DI7
84 DI6
85 DI5
86 DI4
87 DI3
88 DI2
89 DI1
90 DI0
57 EI11
56 EI10
55 EI9
54 EI8
53 EI7
52 EI6
51 EI5
50 EI4
49 EI3
48 EI2
47 EI1
46 EI0
108 SI23
109 SI22
110 SI21
111 SI20
112 SI19
113 SI18
114 SI17
115 SI16
116 SI15
117 SI14
118 SI13
119 SI12
120 SI11
2 SI10
3 SI9
4 SI8
5 SI7
6 SI6
7 SI5
8 SI4
9 SI3
10 SI2
11 SI1
12 SI0
93 CKXI
60 MOD1
59 MOD0
13 OB2S
78 CS
77 DIN
76 CKD
92
16 OE
18 LM1
17 LM0
DO11 73
DO10 72
DO9 71
DO8 70
DO7 69
DO6 68
DO5 67
DO4 66
DO3 65
DO2 64
DO1 63
DO0 62
EO11 94
EO10 95
EO9 96
EO8 97
EO7 98
EO6 99
EO5 100
EO4 101
EO3 102
EO2 103
EO1 106
EO0 107
SO23 43
SO22 42
SO21 41
SO20 40
SO19 39
SO18 38
SO17 37
SO16 36
SO15 35
SO14 34
SO13 33
SO12 32
SO11 30
SO10 29
SO9 28
SO8 27
SO7 26
SO6 25
SO5 24
SO4 23
SO3 22
SO2 21
SO1 20
SO0 19
CKXO 58

INPUT

CK ; SYSTEM CLOCK
CKD ; SERIAL INTERFACE CLOCK
CKXI ; SWITCHING TIMING PULSE
CS ; CHIP SELECT (LOW : ENABLE)
DI0 – DI11 ; 12 BIT DIGITAL IN
DIN ; SERIAL COEFFICIENT DATA IN ($C_0 - C_3$)
EI0 – EI11 ; 12 BIT EXPANSION SHIFT REGISTER IN
LM0, LM1 ; PROGRAMABLE LIMITER SELECT 0, 1

LM1	LM0	SO OUTPUT
0	0	21 BIT
0	1	22 BIT
1	0	23 BIT
1	1	24 BIT

0; LOW LEVEL
1; HIGH LEVEL

MOD0, MOD1 ; MODE SELECT 0, 1

MOD1	MOD0	FUNCTION MODE
1	1	SYMMETRICAL 7 TAP DIGITAL FILTER
0	1	ASYMMETRICAL 4 TAP DIGITAL FILTER
1	0	SYMMETRICAL 13 TAP DIGITAL FILTER
0	0	ASYMMETRICAL 7 TAP DIGITAL FILTER

0; LOW LEVEL
1; HIGH LEVEL

OE ; SO OUTPUT ENABLE IN (LOW : ENABLE)
OB2S ; INPUT/OUTPUT FORMAT SELECT
(AVAILABLE FOR DI, DO, EI, EO, SI, SO)

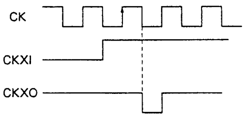
OB2S	I/O FORMAT
0	STRAIGHT BINARY
1	2'S COMPLEMENT

0 ; LOW LEVEL
1 ; HIGH LEVEL

SI0 – SI23 ; 24 BIT EXPANSION ACCUMULATED

OUTPUT

CKXO ; COEFFCIENT DATA SWITCHING PULSE
(DIFFERENCIAL OUTPUT FOR EXPANSION MODE)


CK
CKXI
CKXO

DO0 – DO11 ; 12 BIT DIGITAL OUT

MOD0	DO DELAY AGAINST DI
0	11 CLOCK
1	7 CLOCK

0 ; LOW LEVEL
1 ; HIGH LEVEL

EO0 – EO11 ; 12 BIT EXPANSION SHIFT REGISTER OUT

MOD0	EO DELAY AGAINST EI
0	5 CLOCK
1	1 CLOCK

(MOD1 : LOW MODE)

0 ; LOW LEVEL
1 ; HIGH LEVEL

SO0 – SO23 ; 24 BIT FILTER OUT

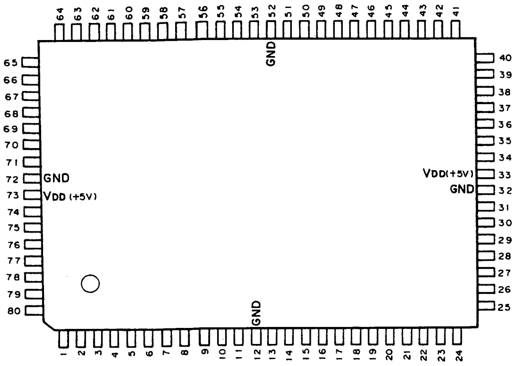
MOD1	MOD0	SO DELAY AGAINST DI	AGAINST SI
0	0	10 CLOCK	3 CLOCK
0	1	7 CLOCK	
1	0	11 CLOCK	4 CLOCK
1	1	8 CLOCK	

0; LOW LEVEL
1; HIGH LEVEL

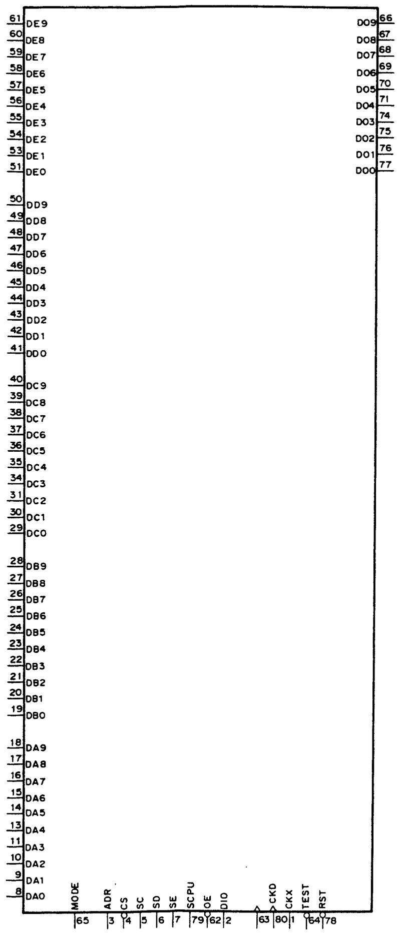
CXD8056Q (SONY) FLAT PACKAGE

C-MOS NAM CROSS POINT

– TOP VIEW –


GND
GND
GND
VDD (+5V)
VDD(+5V)
GND
1–80

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	CKX	21	I	DB2	41	I	DD0	61	I	DE9
2	I/O	DIO	22	I	DB3	42	I	DD1	62	I	OE
3	I	ADR	23	I	DB4	43	I	DD2	63	I	CK
4	I	CS	24	I	DB5	44	I	DD3	64	I	TEST
5	I	SC	25	I	DB6	45	I	DD4	65	I	MODE
6	I	SD	26	I	DB7	46	I	DD5	66	O	DO9
7	I	SE	27	I	DB8	47	I	DD6	67	O	DO8
8	I	DA0	28	I	DB9	48	I	DD7	68	O	DO7
9	I	DA1	29	I	DC0	49	I	DD8	69	O	DO6
10	I	DA2	30	I	DC1	50	I	DD9	70	O	DO5
11	I	DA3	31	I	DC2	51	I	DE0	71	O	DO4
12	–	GND	32	–	GND	52	–	GND	72	–	GND
13	I	DA4	33	–	VDD	53	I	DE1	73	–	VDD
14	I	DA5	34	I	DC3	54	I	DE2	74	O	DO3
15	I	DA6	35	I	DC4	55	I	DE3	75	O	DO2
16	I	DA7	36	I	DC5	56	I	DE4	76	O	DO1
17	I	DA8	37	I	DC6	57	I	DE5	77	O	DO0
18	I	DA9	38	I	DC7	58	I	DE6	78	I	RST
19	I	DB0	39	I	DC8	59	I	DE7	79	I	SCPU
20	I	DB1	40	I	DC9	60	I	DE8	80	I	CKD


DE9
DE8
DE7
DE6
DE5
DE4
DE3
DE2
DE1
DE0
DD9
DD8
DD7
DD6
DD5
DD4
DD3
DD2
DD1
DD0
DC9
DC8
DC7
DC6
DC5
DC4
DC3
DC2
DC1
DC0
DB9
DB8
DB7
DB6
DB5
DB4
DB3
DB2
DB1
DB0
DA9
DA8
DA7
DA6
DA5
DA4
DA3
DA2
DA1
DA0
DO9
DO8
DO7
DO6
DO5
DO4
DO3
DO2
DO1
DO0
MODE
ADR
CS
SC
SD
SE
SCPU
OE
DIO
CKD
CKX
TEST
RST

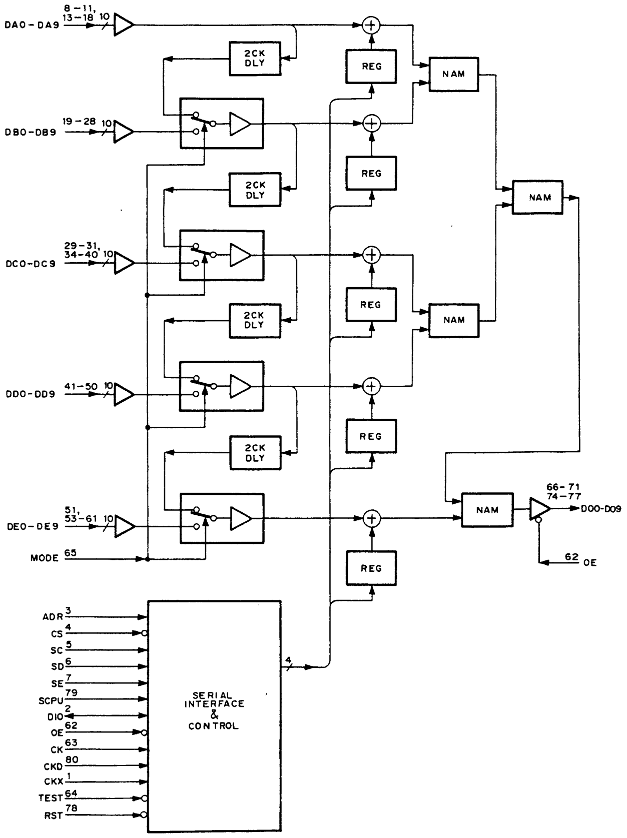
INPUT
CK ; SYSTEM CLOCK
CKD ; SERIAL INTERFACE CLOCK
CKX ; SWITCHING TIMING PULSE
DA0 – DA9 ; 10 BIT DIGITAL IN (CH A)
DB0 – DB9 ; 10 BIT DIGITAL IN (CH B)
DC0 – DC9 ; 10 BIT DIGITAL IN (CH C)
DD0 – DD9 ; 10 BIT DIGITAL IN (CH D)
DE0 – DE9 ; 10 BIT DIGITAL IN (CH E)
MODE ; MODE SELECT
LOW : 1 INPUT MODE (2CK DELAY MODE)
HIGH : 5 INPUT MODE
RST ; RESET PULSE
SCPU ; SELECT CPU
LOW : MANUAL MODE
HIGH : SERIAL INTERFACE MODE
TEST ; TEST MODE (LOW : TEST)

< SERIAL INTERFACE MODE >
ADR ; ADDRESS
CS ; CHIP SELECT
SC ; NOT USED
SD ; NOT USED
SE ; NOT USED

< MANUAL MODE >
ADR ; SELECT CH A
CS ; SELECT CH B
SC ; SELECT CH C
SD ; SELECT CH D
SE ; SELECT CH E

OUTPUT
DO0 – DO9 ; 10 BIT DIGITAL OUT

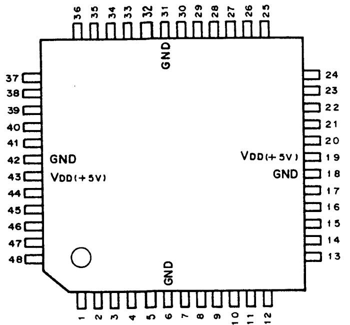
INPUT/OUTPUT
DIO ; SERIAL DATA


DA0 – DA9
8 – 11, 13 – 18
10
DB0 – DB9
19 – 28
DC0 – DC9
29 – 31, 34 – 40
DD0 – DD9
41 – 50
DE0 – DE9
51, 53 – 61
MODE 65
2CK DLY
REG
NAM
66 – 71 74 – 77
DO0 – DO9
62 OE
ADR 3
CS 4
SC 5
SD 6
SE 7
SCPU 79
DIO 2
OE 62
CK 63
CKD 80
CKX 1
TEST 64
RST 78
4
SERIAL INTERFACE & CONTROL

CXD8058Q (SONY) FLAT PACKAGE

C-MOS MEMORY CONTROL

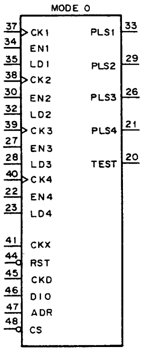
- TOP VIEW -

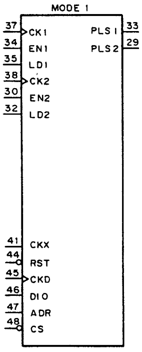

36 35 34 33 32 31 30 29 28 27 26 25
GND
37
38
39
40
41
42
43
44
45
46
47
48
GND
VDD(+5V)
VDD(+5V)
GND
24
23
22
21
20
19
18
17
16
15
14
13
GND
1 2 3 4 5 6 7 8 9 10 11 12

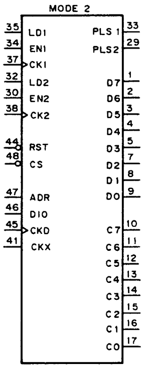
PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I/O	D7/PA4	13	I/O	C4/PD4	25	O	B2	37	I	CK1
2	I/O	D6/PA3	14	I/O	C3/PD3	26	O	B1/PLS3	38	I	CK2
3	I/O	D5/PA2	15	I/O	C2/PD2	27	I/O	B0/EN3	39	I	CK3
4	I/O	D4/PA1	16	I/O	C1/PD1	28	I/O	A7/LD3	40	I	CK4
5	I/O	D3/PDB	17	I/O	C0/PD0	29	O	A6/PLS2	41	I	CKX
6	–	GND	18	–	GND	30	I/O	A5/EN2	42	–	GND
7	I/O	D2/PDA	19	–	VDD	31	–	GND	43	–	VDD
8	I/O	D1/PD9	20	I/O	B7/TEST	32	I/O	A4/LD2	44	I	RST
9	I/O	D0/PD8	21	O	B6/PLS4	33	O	A3/PLS1	45	I	CKD
10	I/O	C7/PD7	22	I/O	B5/EN4	34	I/O	A2/EN1	46	I/O	DIO
11	I/O	C6/PD6	23	I/O	B4/LD4	35	I/O	A1/LD1	47	I	ADR
12	I/O	C5/PD5	24	O	B3	36	O	A0	48	I	CS

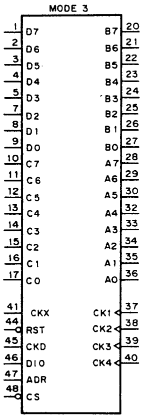
MODE*	FUNCTION
MODE 0	4 CHANNEL (CH1~CH4) CYCLIC PULSE GENERATORS
MODE 1	2 CHANNEL (CH1 AND CH2) CYCLIC PULSE GENERATORS 1 CHANNEL (CH3) CLOCK FREQUENCY COUNTER
MODE 2	2 CHANNEL (CH1 AND CH2) CYCLIC PULSE GENERATORS 2 CHANNEL (CHC AND CHD) 8 BIT SERIAL TO PARALLEL CONVERTOR
MODE 3	4 CHANNEL (CHA~CHD) 8 BIT SERIAL TO PARALLEL CONVERTOR

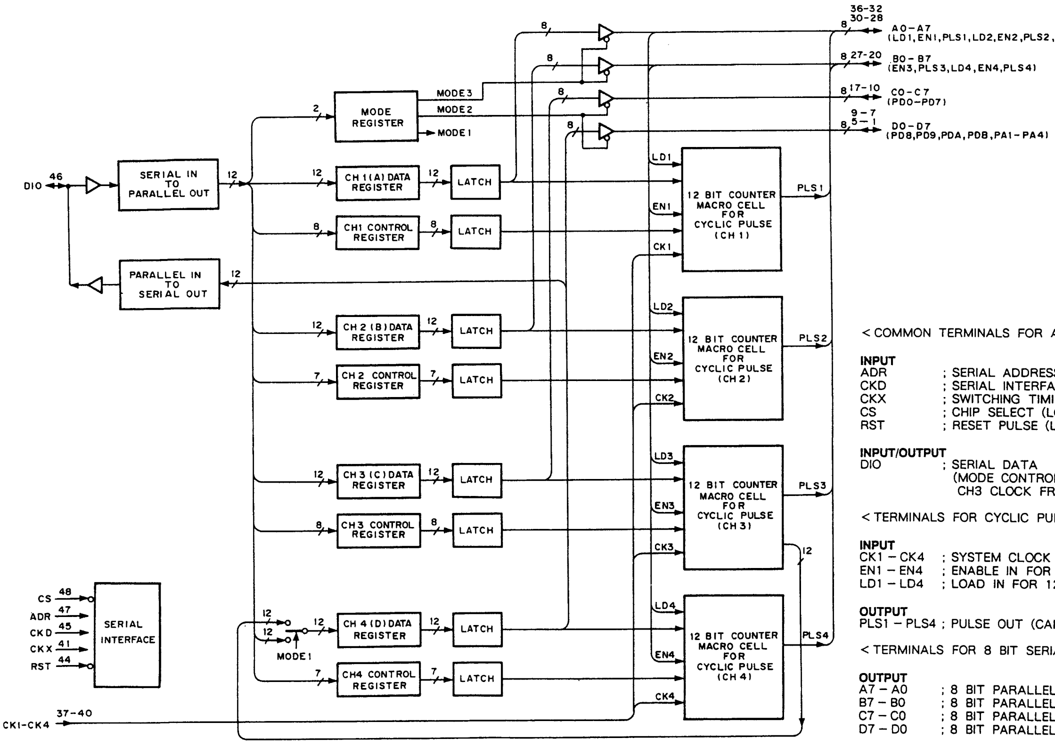
* THESE 4 MODE CONTROLS ARE DETERMINED AT MODE REGISTER.


MODE 0
37 CK1
34 EN1
35 LD1
38 CK2
30 EN2
32 LD2
39 CK3
27 EN3
28 LD3
40 CK4
22 EN4
23 LD4
41 CKX
44 RST
45 CKD
46 DIO
47 ADR
48 CS
PLS1 33
PLS2 29
PLS3 26
PLS4 21
TEST 20


MODE 1
37 CK1
34 EN1
35 LD1
38 CK2
30 EN2
32 LD2
41 CKX
44 RST
45 CKD
46 DIO
47 ADR
48 CS
PLS1 33
PLS2 29


MODE 2
35 LD1
34 EN1
37 CK1
32 LD2
30 EN2
38 CK2
44 RST
48 CS
47 ADR
46 DIO
45 CKD
41 CKX
PLS1 33
PLS2 29
D7 1
D6 2
D5 3
D4 4
D3 5
D2 7
D1 8
D0 9
C7 10
C6 11
C5 12
C4 13
C3 14
C2 15
C1 16
C0 17


MODE 3
1 D7
2 D6
3 D5
4 D4
5 D3
7 D2
8 D1
9 D0
10 C7
11 C6
12 C5
13 C4
14 C3
15 C2
16 C1
17 C0
41 CKX
44 RST
45 CKD
46 DIO
47 ADR
48 CS
B7 20
B6 21
B5 22
B4 23
B3 24
B2 25
B1 26
B0 27
A7 28
A6 29
A5 30
A4 32
A3 33
A2 34
A1 35
A0 36
CK1 37
CK2 38
CK3 39
CK4 40


36-32
30-28
A0-A7
(LD1,EN1,PLS1,LD2,EN2,PLS2,LD3)
27-20
B0-B7
(EN3,PLS3,LD4,EN4,PLS4)
17-10
C0-C7
(PD0-PD7)
9-7
5-1
D0-D7
(PD8,PD9,PDA,PDB,PA1-PA4)
MODE3
MODE2
MODE1
MODE REGISTER
DIO 46
SERIAL IN TO PARALLEL OUT
PARALLEL IN TO SERIAL OUT
CH1 (A) DATA REGISTER
CH1 CONTROL REGISTER
CH2 (B) DATA REGISTER
CH2 CONTROL REGISTER
CH3 (C) DATA REGISTER
CH3 CONTROL REGISTER
CH4 (D) DATA REGISTER
CH4 CONTROL REGISTER
LATCH
12 BIT COUNTER MACRO CELL FOR CYCLIC PULSE (CH1)
12 BIT COUNTER MACRO CELL FOR CYCLIC PULSE (CH2)
12 BIT COUNTER MACRO CELL FOR CYCLIC PULSE (CH3)
12 BIT COUNTER MACRO CELL FOR CYCLIC PULSE (CH4)
LD1
EN1
CK1
PLS1
LD2
EN2
CK2
PLS2
LD3
EN3
CK3
PLS3
LD4
EN4
CK4
PLS4
CS 48
ADR 47
CKD 45
CKX 41
RST 44
SERIAL INTERFACE
CK1-CK4 37-40

< COMMON TERMINALS FOR ALL FUNCTION >

INPUT

ADR	; SERIAL ADDRESS
CKD	; SERIAL INTERFACE CLOCK
CKX	; SWITCHING TIMING PULSE
CS	; CHIP SELECT (LOW : ACTIVE)
RST	; RESET PULSE (LOW : RESET REGISTERS)

INPUT/OUTPUT

DIO	; SERIAL DATA (MODE CONTROL DATA, REGISTER DATA IN CH3 CLOCK FREQUENCY COUNTER DATA OUT)

< TERMINALS FOR CYCLIC PULSE GENERATORS >

INPUT

CK1 – CK4	; SYSTEM CLOCK FOR 12 BIT COUNTER OF CH1 – CH4
EN1 – EN4	; ENABLE IN FOR 12 BIT COUNTER OF CH1 – CH4
LD1 – LD4	; LOAD IN FOR 12 BIT COUNTER OF CH1 – CH4

OUTPUT

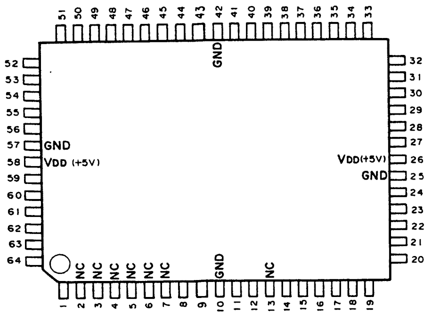
PLS1 – PLS4	; PULSE OUT (CARRY OUTPUT) OF CH1 – CH4

< TERMINALS FOR 8 BIT SERIAL TO PARALLEL CONVERTORS >

OUTPUT

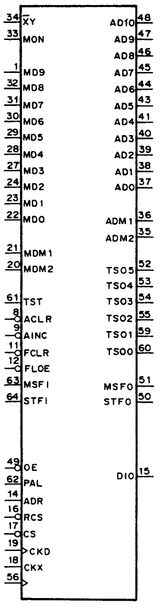
A7 – A0	; 8 BIT PARALLEL DATA OUT OF CHA
B7 – B0	; 8 BIT PARALLEL DATA OUT OF CHB
C7 – C0	; 8 BIT PARALLEL DATA OUT OF CHC
D7 – D0	; 8 BIT PARALLEL DATA OUT OF CHD

CXD8059Q (SONY) FLAT PACKAGE
C-MOS XY ADDRESS GENERATOR
– TOP VIEW –


51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33
52 53 54 55 56 57 58 59 60 61 62 63 64
32 31 30 29 28 27 26 25 24 23 22 21 20
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
GND
GND
VDD (+5V)
VDD(+5V)
GND
NC NC NC NC NC NC
GND
NC

(VDD = + 5V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	MD9	17	I	CS	33	I	MON	49	I	OE
2	–	NC	18	I	CKX	34	I	XY	50	O	STFO
3	–	NC	19	I	CKD	35	O	ADM2	51	O	MSFO
4	–	NC	20	I	MDM2	36	O	ADM1	52	O	TSO5
5	–	NC	21	I	MDM1	37	O	AD0	53	O	TSO4
6	–	NC	22	I	MD0	38	O	AD1	54	O	TSO3
7	–	NC	23	I	MD1	39	O	AD2	55	O	TSO2
8	I	ACLR	24	I	MD2	40	O	AD3	56	I	CK
9	I	AINC	25	–	GND	41	O	AD4	57	–	GND
10	–	GND	26	–	VDD	42	–	GND	58	–	VDD
11	I	FCLR	27	I	MD3	43	O	AD5	59	O	TSO1
12	I	FLOE	28	I	MD4	44	O	AD6	60	O	TSO0
13	–	NC	29	I	MD5	45	O	AD7	61	I	TST
14	I	ADR	30	I	MD6	46	O	AD8	62	I	PAL
15	I/O	DIO	31	I	MD7	47	O	AD9	63	I	MSFI
16	I	RCS	32	I	MD8	48	O	AD10	64	I	STFI


34 XY
33 MON
1 MD9
32 MD8
31 MD7
30 MD6
29 MD5
28 MD4
27 MD3
24 MD2
23 MD1
22 MD0
21 MDM1
20 MDM2
61 TST
8 ACLR
9 AINC
11 FCLR
12 FLOE
63 MSFI
64 STFI
49 OE
62 PAL
14 ADR
16 RCS
17 CS
19 CKD
18 CKX
56
AD10 48
AD9 47
AD8 46
AD7 45
AD6 44
AD5 43
AD4 41
AD3 40
AD2 39
AD1 38
AD0 37
ADM1 36
ADM2 35
TSO5 52
TSO4 53
TSO3 54
TSO2 55
TSO1 59
TSO0 60
MSFO 51
STFO 50
DIO 15

INPUT

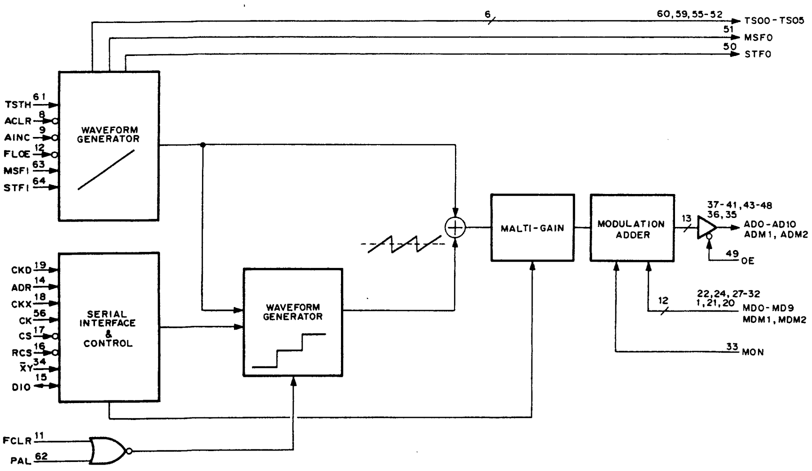
ACLR	; ADDRESS CLEAR TIMING PULSE X MODE ··············$\overline{HD}$ INPUT (‾|___|‾) Y MODE ··············$\overline{VD}$ INPUT (_|‾‾‾|_)
ADR	; SERIAL ADDRESS
AINC	; ADDRESS INCREMENT TIMING PULSE X MODE ··············HIGH OR LOW (FIXED) Y MODE ··············$\overline{HD}$ INPUT (‾|___|‾)
CK	; SYSTEM CLOCK
CKD	; SERIAL INTERFACE CLOCK
CKX	; SWITCHING TIMING PULSE
CS	; CHIP SELECT (LOW : ACTIVE)
FCLR	; FIELD CLEAR TIMING PULSE (FOR PAL) X MODE ··············FIELD RESET PULSE Y MODE ··············HIGH OR LOW (FIXED)
FLOE	; FIELD ODD/EVEN PULSE HIGH : EVEN FIELD
MD0 – MD9	; 9.2 BIT DIGITAL MODULATION DATA IN (2'S COMPLEMENT)
MDM1, MDM2	; 9.2 BIT DIGITAL MODULATION DATA IN (2'S COMPLEMENT)
MON	; MODULATION ON/OFF CONTROL LOW : MODULATION ON
MSFI	; MULTI-SHIFT FLAG IN (LOW : ACTIVE) Y MODE IC ·········PULL UP X MODE IC ·········CONNECT MSFO OUT OF Y MODE IC TO MSFI OF X MODE IC
OE	; OUTPUT ENABLE (LOW : ENABLE, HIGH : DISABLE)
PAL	; NTSC/PAL SELECT
RCS	; READ CHIP SELECT (LOW : ACTIVE)
STFI	; STREAM FLAG IN (LOW : ACTIVE) Y MODE IC ·········PULL UP X MODE IC ·········CONNECT STFO OUT OF Y MODE IC TO STFI OF X MODE IC
XY	; X (HORIZONTAL) /Y (VERTICAL) SELECT LOW : X (HORIZONTAL) ADDRESS GENERATION MODE HIGH : Y (VERTICAL) ADDRESS GENERATION MODE

OUTPUT

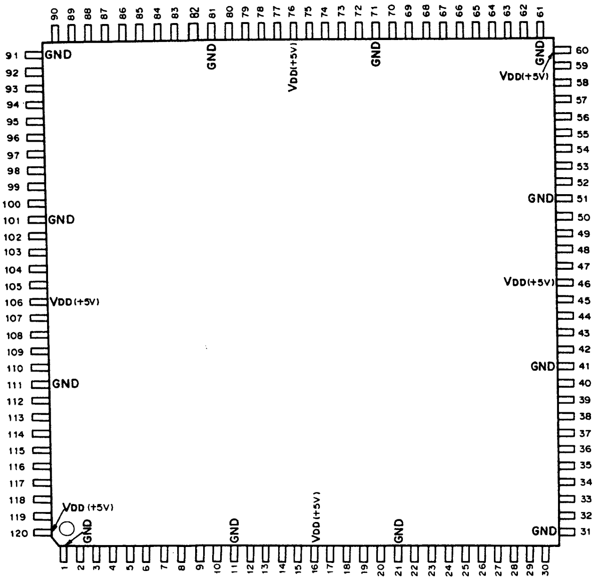
AD0 – AD10	; 11.2 BIT ADDRESS OUT
ADM1, ADM2	; 11.2 BIT ADDRESS OUT
MSFO	; MULTI-SHIFT FLAG OUT (LOW : ACTIVE)
TSTO	; TEST
STFO	; STREAM FLAG OUT (LOW : ACTIVE)

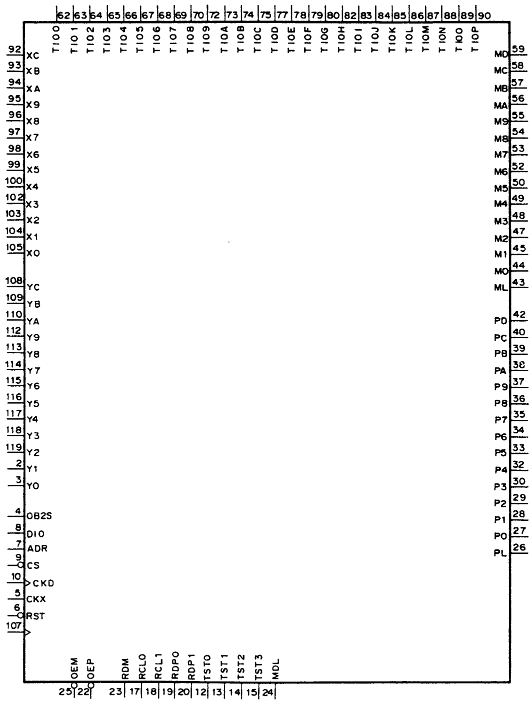
INPUT/OUTPUT

DIO	; SERIAL DATA


6
60, 59, 55-52
TSO0 - TSO5
51
MSFO
50
STFO
TSTH 61
ACLR 8
AINC 9
FLOE 12
MSFI 63
STFI 64
WAVEFORM GENERATOR
CKD 19
ADR 14
CKX 18
CK 56
CS 17
RCS 16
XY 34
DIO 15
SERIAL INTERFACE & CONTROL
WAVEFORM GENERATOR
MALTI-GAIN
MODULATION ADDER
13
37-41, 43-48
36, 35
AD0 - AD10
ADM1, ADM2
49
OE
12
22, 24, 27-32
1, 21, 20
MD0 - MD9
MDM1, MDM2
33
MON
FCLR 11
PAL 62

CXD8060Q (SONY) FLAT PACKAGE
C-MOS POLAR COORDINATE
– TOP VIEW –


GND
VDD(+5V)
GND
GND
VDD(+5V)
GND
GND
VDD(+5V)
GND
GND
VDD(+5V)
GND
VDD(+5V)
GND
GND
VDD(+5V)
GND
GND


TIO0 TIO1 TIO2 TIO3 TIO4 TIO5 TIO6 TIO7 TIO8 TIO9 TIOA TIOB TIOC TIOD TIOE TIOF TIOG TIOH TIOI TIOJ TIOK TIOL TIOM TION TIOO TIOP
XC XB XA X9 X8 X7 X6 X5 X4 X3 X2 X1 X0
YC YB YA Y9 Y8 Y7 Y6 Y5 Y4 Y3 Y2 Y1 Y0
OB2S
DIO
ADR
CS
CKD
CKX
RST
MD MC MB MA M9 M8 M7 M6 M5 M4 M3 M2 M1 M0 ML
PD PC PB PA P9 P8 P7 P6 P5 P4 P3 P2 P1 P0 PL
OEM OEP RDM RCLO RCL1 RDPO RDP1 TSTO TST1 TST2 TST3 MDL

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	–	GND	31	–	GND	61	–	GND	91	–	GND
2	I	Y1	32	O	P4	62	I/O	TIO0	92	I	XC
3	I	Y0	33	O	P5	63	I/O	TIO1	93	I	XB
4	I	OB2S	34	O	P6	64	I/O	TIO2	94	I	XA
5	I	CKX	35	O	P7	65	I/O	TIO3	95	I	X9
6	I	RST	36	O	P8	66	I/O	TIO4	96	I	X8
7	I	ADR	37	O	P9	67	I/O	TIO5	97	I	X7
8	I/O	DIO	38	O	PA	68	I/O	TIO6	98	I	X6
9	I	CS	39	O	PB	69	I/O	TIO7	99	I	X5
10	I	CKD	40	O	PC	70	I/O	TIO8	100	I	X4
11	–	GND	41	–	GND	71	–	GND	101	–	GND
12	I	TST0	42	O	PD	72	I/O	TIO9	102	I	X3
13	I	TST1	43	O	ML	73	I/O	TIOA	103	I	X2
14	I	TST2	44	O	M0	74	I/O	TIOB	104	I	X1
15	I	TST3	45	O	M1	75	I/O	TIOC	105	I	X0
16	–	VDD	46	–	VDD	76	–	VDD	106	–	VDD
17	I	RCL0	47	O	M2	77	I/O	TIOD	107	I	CK
18	I	RCL1	48	O	M3	78	I/O	TIOE	108	I	YC
19	I	RDP0	49	O	M4	79	I/O	TIOF	109	I	YB
20	I	RDP1	50	O	M5	80	I/O	TIOG	110	I	YA
21	–	GND	51	–	GND	81	–	GND	111	–	GND
22	I	OEP	52	O	M6	82	I/O	TIOH	112	I	Y9
23	I	RDM	53	O	M7	83	I/O	TIOI	113	I	Y8
24	I	MDL	54	O	M8	84	I/O	TIOJ	114	I	Y7
25	I	OEM	55	O	M9	85	I/O	TIOK	115	I	Y6
26	O	PL	56	O	MA	86	I/O	TIOL	116	I	Y5
27	O	P0	57	O	MB	87	I/O	TIOM	117	I	Y4
28	O	P1	58	O	MC	88	I/O	TION	118	I	Y3
29	O	P2	59	O	MD	89	I/O	TIOO	119	I	Y2
30	O	P3	60	–	VDD	90	I/O	TIOP	120	–	VDD

INPUT

ADR	; SERIAL ADDRESS
CK	; SYSTEM CLOCK
CKD	; SERIAL INTERFACE CLOCK
CKX	; SWITCHING TIMING PULSE
CS	; CHIP SELECT
MDL	; M OUTPUT DELAY CONTROL (HIGH : NORMAL, LOW : 2CK DELAY MODE)
OB2S	; OFFSET BINARY/2'S COMPLEMENT SELECT (HIGH : 2'S COMPLEMENT, LOW : OFFSET BINARY)
OEM	; M OUT ENABLE (LOW : ENABLE)
OEP	; P OUT ENABLE (LOW : ENABLE)
RCL0	; REGISTER CLEAR (HIGH : NORMAL, LOW : SET A AND B DATA TO 0)
RCL1	; REGISTER CLEAR IN 1 (HIGH : NORMAL, LOW : SET C DATA TO 0)
RDM	; ROUNDING M OUT (HIGH)/DISCARD M OUT SELECT (LOW)
RDP0, RDP1	; ROUNDING P OUT (HIGH)/DISCARD P OUT SELECT (LOW)
RST	; RESET PULSE (LOW : SET DIO TERMINAL TO FIXED INPUT MODE)
TST0 – TST3	; FUNCTION MODE SELECT

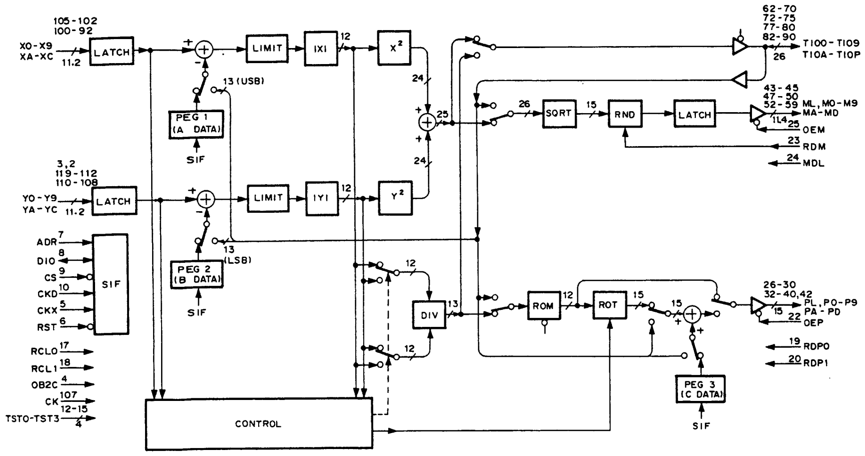
TST3	TST2	TST1	TST0	FUNCTION MODE	TIO TERMINAL I/O STATUS
1	1	1	0	$M=\sqrt{(X-A)^2+(Y-B)^2}$, $P=\tan^{-1}\left(\frac{Y-B}{X-A}\right)+C$ A, B, C : SERIAL DATA	OUTPUT : $(X-A)^2+(Y-B)^2$
			1		OUTPUT : $\lvert X-A\rvert / \lvert Y-B\rvert$, $\lvert Y-B\rvert / \lvert X-A\rvert$
0	0	0	×	$M=\sqrt{(X-A)^2+(Y-B)^2}$, $P=\tan^{-1}\left(\frac{Y-B}{X-A}\right)+C$ A, B : TIO INPUT, C : SERIAL DATA	INPUT (A AND B DATA)
0	1	1	×	$M=\sqrt{(X-A)^2+(Y-B)^2}$, $P=\tan^{-1}\left(\frac{Y-B}{X-A}\right)+C$ A, B : SERIAL DATA, C : TIO INPUT	INPUT (C DATA)
0	0	1	×	$M=\sqrt{R}$ R : TIO INPUT	INPUT (R)
1	1	0	×	$M=\tan^{-1}D$ D : TIO INPUT	INPUT (D)

×; DON'T CARE

X0 – X9, XA – XC ; 11.2 BIT DIGITAL IN
Y0 – Y9, YA – YC ; 11.2 BIT DIGITAL IN

OUTPUT
ML, M0 – M9, MA – MD ; 11.4 BIT DIGITAL OUT (RADIUS DATA)
PL, P0 – P9, PA – PD ; 15 BIT DIGITAL OUT (ANGLE DATA)

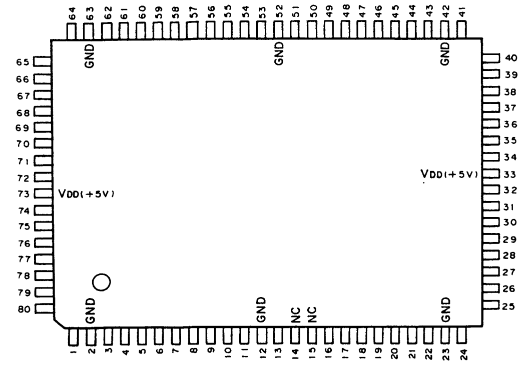
INPUT/OUTPUT
DIO ; SERIAL DATA
TIO0 – TIO9, TIOA – TIOP; TEST


105-102
100-92
X0-X9
XA-XC
11.2
LATCH
LIMIT
IXI
12
X²
13 (USB)
PEG 1
(A DATA)
SIF
24
25
3,2
119-112
110-108
Y0-Y9
YA-YC
11.2
LATCH
LIMIT
IYI
12
Y²
24
ADR 7
DIO 8
CS 9
CKD 10
CKX 5
RST 6
SIF
13 (LSB)
PEG 2
(B DATA)
SIF
RCL0 17
RCL1 18
OB2C 4
CK 107
TST0-TST3 12-15 4
CONTROL
12
12
DIV
13
62-70
72-75
77-80
82-90
T100-T109
T10A-T10P
26
43-45
47-50
52-59
ML, M0-M9
MA-MD
26
SQRT
15
RND
LATCH
1L4
25 OEM
23 RDM
24 MDL
ROM
12
ROT
15
15
26-30
32-40,42
PL, P0-P9
PA-PD
15
22 OEP
19 RDP0
20 RDP1
PEG 3
(C DATA)
SIF

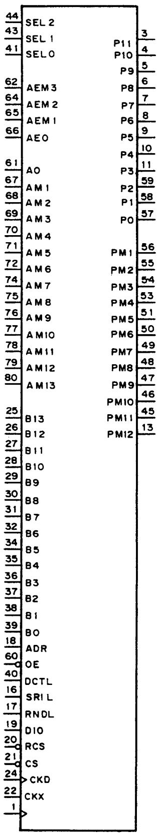
CXD8061Q (SONY) FLAT PACKAGE

C-MOS SOLID GENERATOR

– TOP VIEW –


GND
GND
GND
VDD(+5V)
VDD(+5V)
GND
GND
NC
NC
GND
1–80

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	CK	21	I	CS	41	I	SEL0	61	I	A0
2	–	GND	22	I	CKX	42	–	GND	62	I	AEM3
3	O	P11	23	–	GND	43	I	SEL1	63	–	GND
4	O	P10	24	I	CKD	44	I	SEL2	64	I	AEM2
5	O	P9	25	I	B13	45	O	PM11	65	I	AEM1
6	O	P8	26	I	B12	46	O	PM10	66	I	AE0
7	O	P7	27	I	B11	47	O	PM9	67	I	AM1
8	O	P6	28	I	B10	48	O	PM8	68	I	AM2
9	O	P5	29	I	B9	49	O	PM7	69	I	AM3
10	O	P4	30	I	B8	50	O	PM6	70	I	AM4
11	O	P3	31	I	B7	51	O	PM5	71	I	AM5
12	–	GND	32	I	B6	52	–	GND	72	I	AM6
13	O	PM12	33	–	VDD	53	O	PM4	73	–	VDD
14	–	NC	34	I	B5	54	O	PM3	74	I	AM7
15	–	NC	35	I	B4	55	O	PM2	75	I	AM8
16	I	SRIL	36	I	B3	56	O	PM1	76	I	AM9
17	I	RNDL	37	I	B2	57	O	P0	77	I	AM10
18	I	ADR	38	I	B1	58	O	P1	78	I	AM11
19	I/O	DIO	39	I	B0	59	O	P2	79	I	AM12
20	I	RCS	40	I	DCTL	60	I	OE	80	I	AM13


44 SEL2
43 SEL1
41 SEL0
62 AEM3
64 AEM2
65 AEM1
66 AE0
61 A0
67 AM1
68 AM2
69 AM3
70 AM4
71 AM5
72 AM6
74 AM7
75 AM8
76 AM9
77 AM10
78 AM11
79 AM12
80 AM13
25 B13
26 B12
27 B11
28 B10
29 B9
30 B8
31 B7
32 B6
34 B5
35 B4
36 B3
37 B2
38 B1
39 B0
18 ADR
60 OE
40 DCTL
16 SRIL
17 RNDL
19 DIO
20 RCS
21 CS
24 CKD
22 CKX
1
P11 3
P10 4
P9 5
P8 6
P7 7
P6 8
P5 9
P4 10
P3 11
P2 59
P1 58
P0 57
PM1 56
PM2 55
PM3 54
PM4 53
PM5 51
PM6 50
PM7 49
PM8 48
PM9 47
PM10 46
PM11 45
PM12 13

INPUT

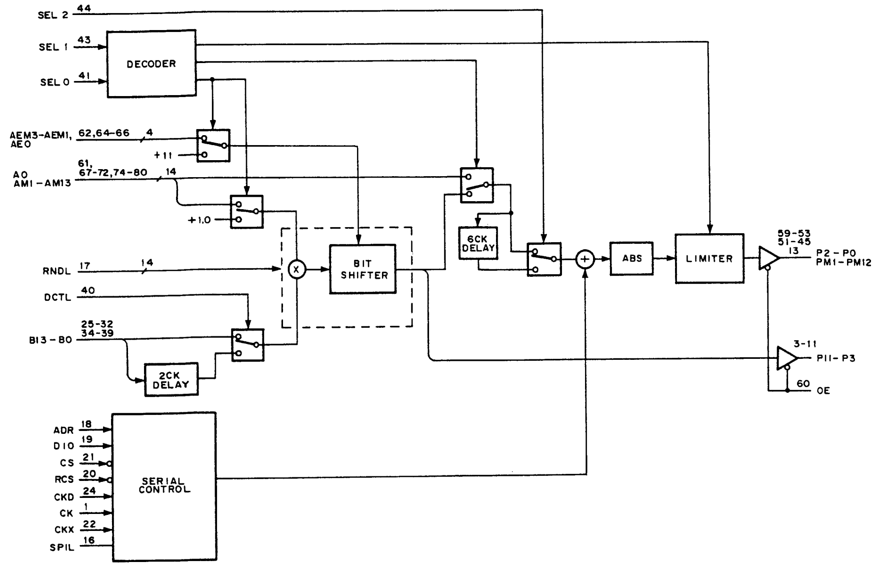
A0, AM1 – AM13	; MANTISSA OF FLOWTING-POINT REPRESENTATION
ADR	; SERIAL ADDRESS
AE0, AEM1 – AEM3	; EXPONENT OF FLOWTING-POINT REPRESENTATION
B0 – B13	; FIXED-POINT REPRESENTATION
CK	; SYSTEM CLOCK
CKD	; SERIAL INTERFACE CLOCK
CKX	; SWITCHING TIMING PULSE
CS	; CHIP SELECT (LOW : ACTIVE)
DCTL	; DELAY CONTROL OF B0 – B13 INPUT (LOW : ACTIVE)
OE	; OUTPUT ENABLE (LOW : ENABLE)
RNDL	; MULTIPLIER ROUNDING CONTROL (LOW : ACTIVE)
SEL0, SEL1	; SEL (0, 1) = (0, 0) BYPASS A (A IN → P OUT) = (0, 1) BYPASS B (B IN → P OUT) = (1, 0) P = A × B = (1, 1) P = A × B
SEL2	; DELAY CONTROL OF P2 – PM12 OUTPUT (HIGH : ACTIVE)
SRIL	; SERIAL CONTROL ENABLE (LOW : ACTIVE)

OUTPUT

P0 – P11, PM1 – PM12	; MULTIPLIER OUTPUT (SOLID DATA : P2 – P0, PM1 – PM12)

INPUT/OUTPUT

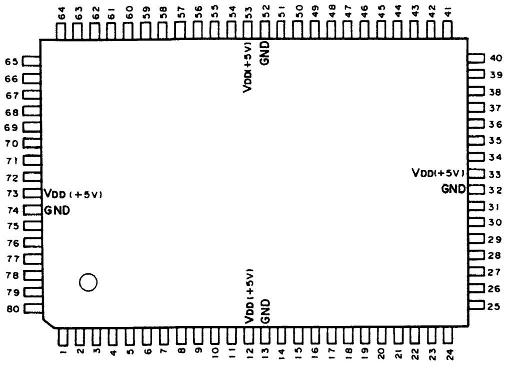
DIO	; SERIAL DATA


SEL 2 44
SEL 1 43
SEL 0 41
DECODER
AEM3-AEM1, AE0 62,64-66 4
+1I
A0 AM1-AM13 61, 67-72,74-80 14
+1.0
RNDL 17 14
DCTL 40
B13-B0 25-32 34-39
2CK DELAY
BIT SHIFTER
6CK DELAY
ABS
LIMITER
59-53 51-45 13
P2-P0 PM1-PM12
3-11
P11-P3
60 OE
ADR 18
DIO 19
CS 21
RCS 20
CKD 24
CK 1
CKX 22
SPIL 16
SERIAL CONTROL

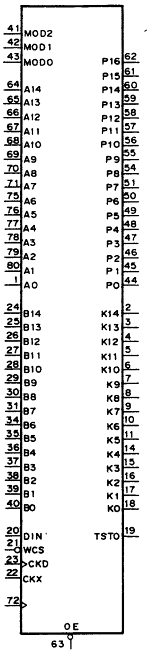
CXD8062Q (SONY) FLAT PACKAGE

C-MOS WIPE MIXER

– TOP VIEW –


VDD(+5V)
GND
VDD(+5V)
GND
VDD(+5V)
GND
VDD(+5V)
GND

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	A0	21	I	WCS	41	I	MOD2	61	O	P15
2	I/O	K14	22	I	CKX	42	I	MOD1	62	O	P16
3	I/O	K13	23	I	CKD	43	I	MOD0	63	I	OE
4	I/O	K12	24	I	B14	44	I	P0	64	I	A14
5	I/O	K11	25	I	B13	45	I	P1	65	I	A13
6	I/O	K10	26	I	B12	46	I	P2	66	I	A12
7	I/O	K9	27	I	B11	47	I	P3	67	I	A11
8	I/O	K8	28	I	B10	48	I	P4	68	I	A10
9	I/O	K7	29	I	B9	49	I	P5	69	I	A9
10	I/O	K6	30	I	B8	50	I	P6	70	I	A8
11	I/O	K5	31	I	B7	51	I	P7	71	I	A7
12	–	VDD	32	–	GND	52	–	GND	72	I	CK
13	–	GND	33	–	VDD	53	–	VDD	73	–	VDD
14	I/O	K4	34	I	B6	54	O	P8	74	–	GND
15	I/O	K3	35	I	B5	55	O	P9	75	I	A6
16	I/O	K2	36	I	B4	56	O	P10	76	I	A5
17	I/O	K1	37	I	B3	57	O	P11	77	I	A4
18	I/O	K0	38	I	B2	58	O	P12	78	I	A3
19	O	TSTO	39	I	B1	59	O	P13	79	I	A2
20	I	DIN	40	I	B0	60	O	P14	80	I	A1


MOD2 41
MOD1 42
MOD0 43
A14 64
A13 65
A12 66
A11 67
A10 68
A9 69
A8 70
A7 71
A6 75
A5 76
A4 77
A3 78
A2 79
A1 80
A0 1
B14 24
B13 25
B12 26
B11 27
B10 28
B9 29
B8 30
B7 31
B6 34
B5 35
B4 36
B3 37
B2 38
B1 39
B0 40
DIN 20
WCS 21
CKD 23
CKX 22
72
P16 62
P15 61
P14 60
P13 59
P12 58
P11 57
P10 56
P9 55
P8 54
P7 51
P6 50
P5 49
P4 48
P3 47
P2 46
P1 45
P0 44
K14 2
K13 3
K12 4
K11 5
K10 6
K9 7
K8 8
K7 9
K6 10
K5 11
K4 14
K3 15
K2 16
K1 17
K0 18
TSTO 19
OE 63

INPUT
A0 – A14 ; 15 BIT DIGITAL IN A (2'S COMPLEMENT)
B0 – B14 ; 15 BIT DIGITAL IN B (2'S COMPLEMENT)
CK ; SYSTEM CLOCK
CKD ; SERIAL INTERFACE CLOCK
CKX ; SWITCHING TIMING PULSE
DIN ; SERIAL DATA
MOD0 – MOD2 ; MODE SELECT 0 – 2
OE ; OUTPUT ENABLE (LOW : ENABLE)
WCS ; WRITE CHIP SELECT (LOW : WRITE)

OUTPUT
P0 – P16 ; 17 BIT DIGITAL OUT (2'S COMPLEMENT)
TSTO ; TEST OUT

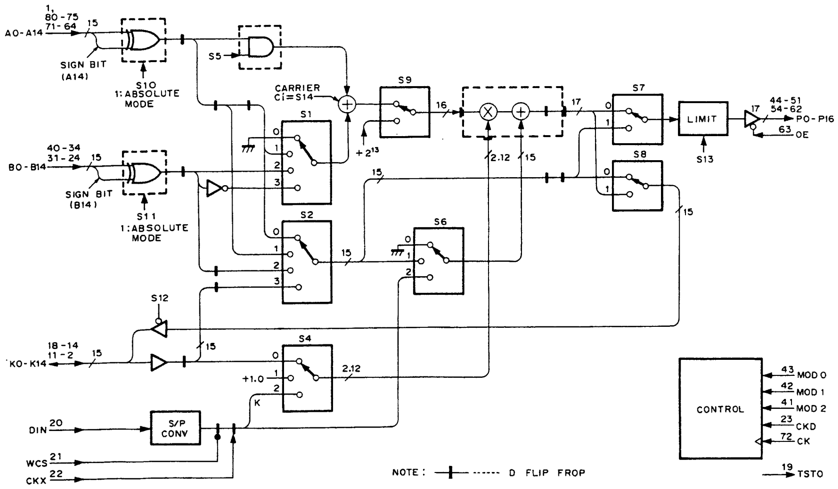
INPUT/OUTPUT
K0 – K14 ; 15 BIT DIGITAL IN/OUT
(2'S COMPLEMENT)

MOD2	MOD1	MOD0	SFG2	SFG1	SFG0	FUNCTION	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14
0	0	0	–	–	–	MIXER (REAL TIME K), P = KA + (1 − K) B	3	2	–	0	1	1	0	0	0	0	0	1	1	1
0	0	1	–	–	–	MIXER (SERIAL k), P = kA + (1 − k) B	3	2	–	2	1	1	0	0	0	0	0	1	1	1
0	1	0	–	–	–	K − 1 − K FILTER, $P(Z) = (K + Z^{-1} + KZ^{-2}) \cdot Z^{-3} \cdot A$	1	0	–	0	1	1	0	0	0	0	0	1	1	0
0	1	1	–	–	0	ASPECT A, P = k · A, K = B	0	2	–	2	1	0	0	0	0	0	0	0	1	0
					1	ASPECT B, P = A, K = k · B	2	1	–	2	0	0	1	1	0	0	0	0	1	0
1	0	0	–	–	–	FILTER I, P = A + B + K	2	3	–	1	1	1	0	0	0	0	0	1	1	0
1	0	1	–	–	–	FILTER II, P = k · (A + B) + K	2	3	–	2	1	1	0	0	0	0	0	1	1	0
1	1	0	0	0	0	ADD MODE, P = A + B + k (SFG2 → ON : A INPUT → ABSOLUTE SFG1 → ON : B INPUT → ABSOLUTE)	2	3	–	1	1	2	0	1	0	0	0	0	0	0
			0	1												0	1			
			1	0												1	0			
			1	1												1	1			
			0	0	1	POSI NAM, P = MAX (A, B) (SFG1 → ON : A, B INPUTS → ABSOLUTE)	3	1 or 2	–	2	1	1	0	1	1	0	0	0	0	0
			0	1												1	1			
			1	0		NEGA NAM, P = MIN (A, B) (SFG1 → ON : A, B INPUTS → ABSOLUTE)										0	0			
			1	1												1	1			
1	1	1	–	–	–	4 CLOCK DELAY, P = A, K = B	0	2	–	1	1	0	0	0	0	0	0	0	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

NOTE:
SERIAL DATA (DIN)

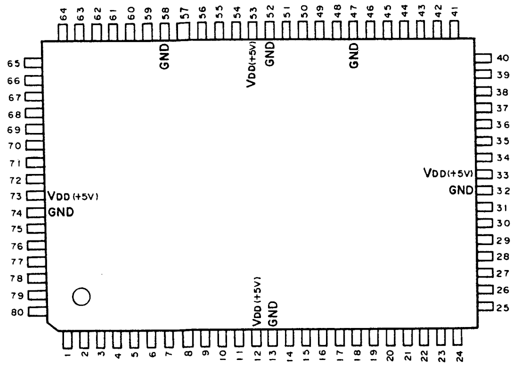
k15															k0
													SFG2	SFG1	SFG0


1,
80 - 75
71 - 64
15
A0 - A14
SIGN BIT
(A14)
S10
1: ABSOLUTE
MODE
S5
CARRIER
Ci = S14
S9
+2¹³
16
2.12
15
17
S7
0
1
LIMIT
S13
17
44 - 51
54 - 62
P0 - P16
63
OE
S8
40 - 34
31 - 24
15
B0 - B14
SIGN BIT
(B14)
S11
1: ABSOLUTE
MODE
S1
0
1
2
3
S2
S6
15
S12
18 - 14
11 - 2
K0 - K14
S4
+1.0
K
2.12
DIN 20
S/P
CONV
WCS 21
CKX 22
CONTROL
43 MOD 0
42 MOD 1
41 MOD 2
23 CKD
72 CK
19 TSTO
NOTE : ------ D FLIP FROP

CXD8063Q (SONY) FLAT PACKAGE

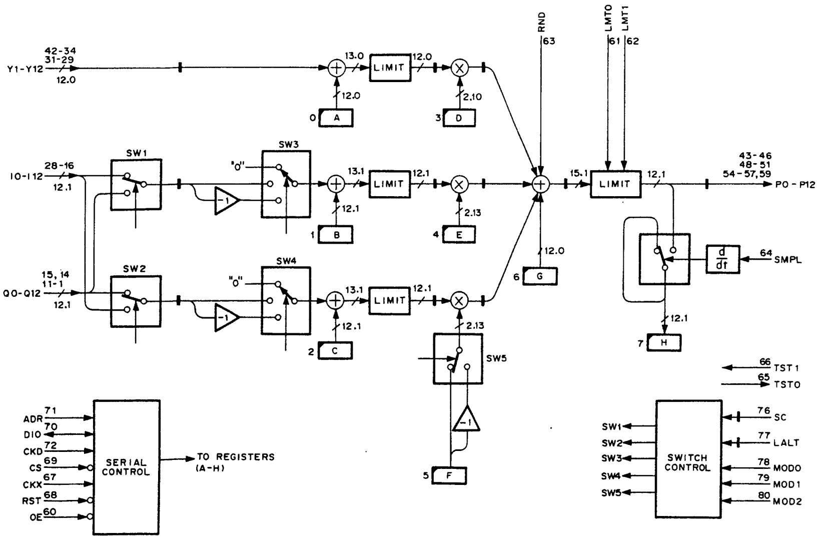
C-MOS MATRIX/ENCODER

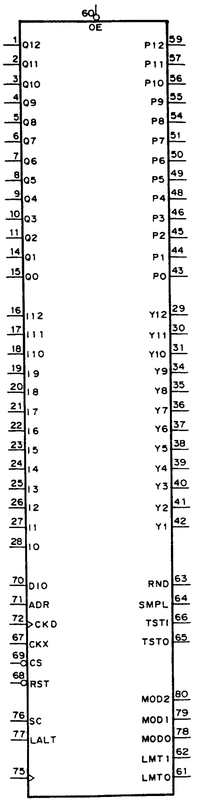
- TOP VIEW -


64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41
GND
VDD(+5V)
GND
GND
65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80
VDD (+5V)
GND
40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25
VDD(+5V)
GND
VDD (+5V)
GND
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

(VDD = + 5V)

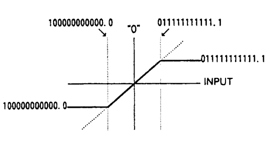
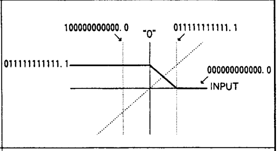
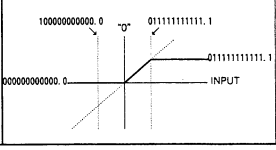
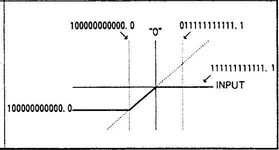
PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	Q12	21	I	I7	41	I	Y2	61	I	LMT0
2	I	Q11	22	I	I6	42	I	Y1	62	I	LMT1
3	I	Q10	23	I	I5	43	I	P0	63	I	RND
4	I	Q9	24	I	I4	44	I	P1	64	I	SMPL
5	I	Q8	25	I	I3	45	I	P2	65	O	TSTO
6	I	Q7	26	I	I2	46	I	P3	66	I	TST1
7	I	Q6	27	I	I1	47	–	GND	67	I	CKX
8	I	Q5	28	I	I0	48	I	P4	68	I	RST
9	I	Q4	29	I	Y12	49	I	P5	69	I	CS
10	I	Q3	30	I	Y11	50	I	P6	70	I/O	DIO
11	I	Q2	31	I	Y10	51	I	P7	71	I	ADR
12	–	VDD (+5V)	32	–	GND	52	–	GND	72	I	CKD
13	–	GND	33	–	VDD (+5V)	53	–	VDD (+5V)	73	–	VDD (+5V)
14	I	Q1	34	I	Y9	54	I	P8	74	–	GND
15	I	Q0	35	I	Y8	55	I	P9	75	I	CK
16	I	I12	36	I	Y7	56	I	P10	76	I	SC
17	I	I11	37	I	Y6	57	I	P11	77	I	LALT
18	I	I10	38	I	Y5	58	–	GND	78	I	MOD0
19	I	I9	39	I	Y4	59	I	P12	79	I	MOD1
20	I	I8	40	I	Y3	60	I	OE	80	I	MOD2


RND
63
LMT0
LMT1
61
62
Y1-Y12
42-34
31-29
12.0
13.0
LIMIT
12.0
12.0
2.10
0 A
3 D
I0-I12
28-16
12.1
SW1
SW3
"0"
-1
13.1
LIMIT
12.1
12.1
2.13
1 B
4 E
15.1
LIMIT
12.1
43-46
48-51
54-57,59
P0 - P12
d/dt
64 SMPL
12.0
6 G
12.1
7 H
Q0-Q12
15, 14
11-1
12.1
SW2
SW4
"0"
-1
13.1
LIMIT
12.1
12.1
2.13
2 C
SW5
-1
5 F
66 TST1
65 TSTO
ADR 71
DIO 70
CKD 72
CS 69
CKX 67
RST 68
OE 60
SERIAL CONTROL
TO REGISTERS (A-H)
SW1
SW2
SW3
SW4
SW5
SWITCH CONTROL
76 SC
77 LALT
78 MOD0
79 MOD1
80 MOD2


60 OE
1 Q12
2 Q11
3 Q10
4 Q9
5 Q8
6 Q7
7 Q6
8 Q5
9 Q4
10 Q3
11 Q2
14 Q1
15 Q0
16 I12
17 I11
18 I10
19 I9
20 I8
21 I7
22 I6
23 I5
24 I4
25 I3
26 I2
27 I1
28 I0
70 DIO
71 ADR
72 CKD
67 CKX
69 CS
68 RST
76 SC
77 LALT
75
P12 59
P11 57
P10 56
P9 55
P8 54
P7 51
P6 50
P5 49
P4 48
P3 46
P2 45
P1 44
P0 43
Y12 29
Y11 30
Y10 31
Y9 34
Y8 35
Y7 36
Y6 37
Y5 38
Y4 39
Y3 40
Y2 41
Y1 42
RND 63
SMPL 64
TST1 66
TSTO 65
MOD2 80
MOD1 79
MOD0 78
LMT1 62
LMT0 61

INPUT

ADR ; SERIAL ADDRESS
CK ; SYSTEM CLOCK
CKD ; SERIAL INTERFACE CLOCK
CKX ; SWITCHING TIMING PULSE
CS ; CHIP SELECT (LOW : ACTIVE)
I0 – I12 ; I IN (2'S COMPLEMENT 12.1 BIT)
LALT ; LINE ALTERNATE PULSE
< FOR D II PAL >
(HIGH : EVEN, LOW : ODD)
< FOR D II NTSC >
(HIGH : CONTINUOUS)
LMT0, LMT1 ; P OUTPUT LIMITER MODE CONTROL

LMT1 LMT0	L	H
L		
H		

MOD0 – MOD2 ; MODE SELECT

MOD2	MOD1	MOD0	MODE AND FUNCTION
0	0	0	MATRIX, P=(Y+a)×d+(I+b)×e+(Q+C)×f+g
0	0	1	NOT USED
0	1	0	ROTATION I, P=(Y+a)×d+(I+b)×e+(Q+C)×(−f)+g
0	1	1	ROTATION II, P=(Y+a)×d+(I+C)×f+(Q+b)×e+g
1	0	0	NOT USED
1	0	1	NOT USED
1	1	0	ENCODER (NTSC)
1	1	1	ENCODER (PAL)

a, b, c, ...g : REGISTER DATA FROM SERIAL DATA

0 ; LOW LEVEL
1 ; HIGH LEVEL

OE ; P OUTPUT ENABLE CONTROL (LOW : ENABLE)
Q0 – Q12 ; Q IN (2'S COMPLEMENT 12.1 BIT)
RND ; ROUNDING P OUTPUT CONTROL (HIGH : ACTIVE)
RST ; RESET PULSE (LOW : RESET SERIAL I/F)
SC ; SUBCARRIER IN
SMPL ; SAMPLING PULSE FOR P OUTPUT (⨍)
TST1 ; TEST MODE CONTROL (HIGH : TEST MODE)
Y1 – Y12 ; Y IN (2'S COMPLEMENT 12.0 BIT)

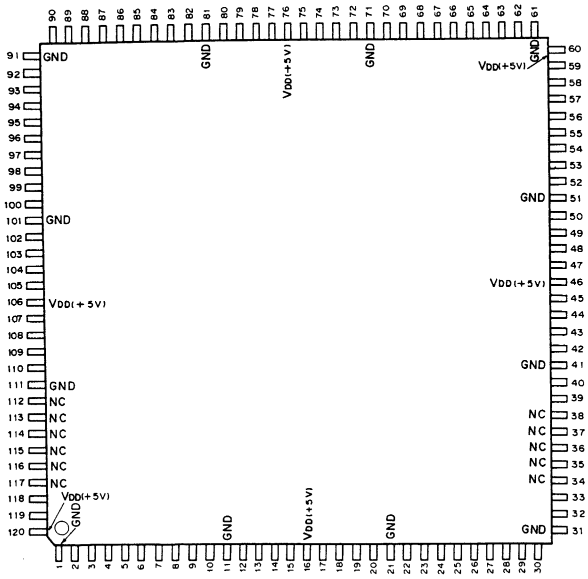
OUTPUT

P0 – P12 ; P OUT (2'S COMPLEMENT, 12.1 BIT)
TSTO ; TEST

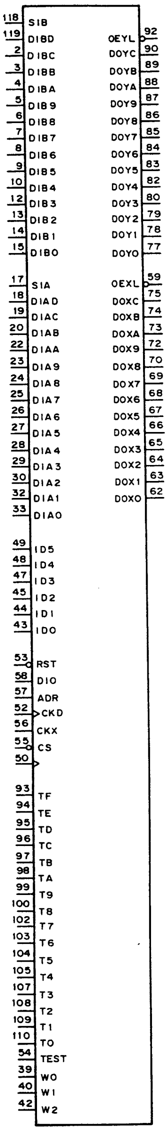
INPUT/OUTPUT

DIO ; SERIAL DATA

CXD8065Q (SONY) FLAT PACKAGE
C-MOS KEY PROCESSOR
– TOP VIEW –


90 89 88 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61
GND
GND
VDD(+5V)
GND
GND
VDD(+5V)
60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31
GND
VDD(+5V)
GND
NC
NC
NC
NC
NC
GND
91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120
GND
GND
VDD(+5V)
GND
NC
NC
NC
NC
NC
NC
VDD(+5V)
GND
GND
VDD(+5V)
GND
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

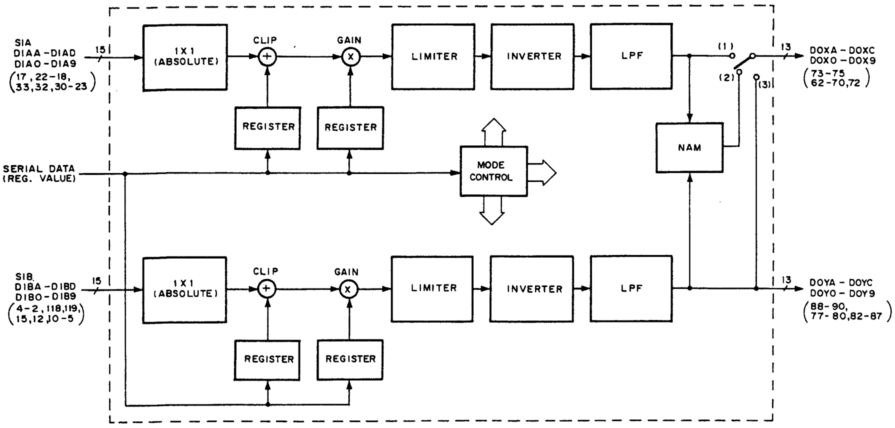
PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	–	GND	31	–	GND	61	–	GND	91	–	GND
2	I	DIBC	32	I	DIA1	62	O	DOX0	92	I	OEYL
3	I	DIBB	33	I	DIA0	63	O	DOX1	93	I	TF
4	I	DIBA	34	–	NC	64	O	DOX2	94	I	TE
5	I	DIB9	35	–	NC	65	O	DOX3	95	I	TD
6	I	DIB8	36	–	NC	66	O	DOX4	96	I	TC
7	I	DIB7	37	–	NC	67	O	DOX5	97	I	TB
8	I	DIB6	38	–	NC	68	O	DOX6	98	I	TA
9	I	DIB5	39	I	WA0	69	O	DOX7	99	I	T9
10	I	DIB4	40	I	WA1	70	O	COX8	100	I	T8
11	–	GND	41	–	GND	71	–	GND	101	–	GND
12	I	DIB3	42	I	WA2	72	O	DOX9	102	I	T7
13	I	DIB2	43	I	ID0	73	O	DOXA	103	I	T6
14	I	DIB1	44	I	ID1	74	O	DOXB	104	I	T5
15	I	DIB0	45	I	ID2	75	O	DOXC	105	I	T4
16	–	VDD	46	–	VDD	76	–	VDD	106	–	VDD
17	I	SIA	47	I	ID3	77	O	DOY0	107	I	T3
18	I	DIAD	48	I	ID4	78	O	DOY1	108	I	T2
19	I	DIAC	49	I	ID5	79	O	DOY2	109	I	T1
20	I	DIAB	50	I	CK	80	O	DOY3	110	I	T0
21	–	GND	51	–	GND	81	–	GND	111	–	GND
22	I	DIAA	52	I	CKD	82	O	DOY4	112	–	NC
23	I	DIA9	53	I	CLR	83	O	DOY5	113	–	NC
24	I	DIA8	54	I	TEST	84	O	DOY6	114	–	NC
25	I	DIA7	55	I	CS	85	O	DOY7	115	–	NC
26	I	DIA6	56	I	CKX	86	O	DOY8	116	–	NC
27	I	DIA5	57	I	ADR	87	O	DOY9	117	–	NC
28	I	DIA4	58	I/O	DIO	88	O	DOYA	118	I	SIB
29	I	DIA3	59	I	OEXL	89	O	DOYB	119	I	DIBD
30	I	DIA2	60	–	VDD	90	O	DOYC	120	–	VDD


118 SIB
119 DIBD
2 DIBC
3 DIBB
4 DIBA
5 DIB9
6 DIB8
7 DIB7
8 DIB6
9 DIB5
10 DIB4
12 DIB3
13 DIB2
14 DIB1
15 DIB0
17 SIA
18 DIAD
19 DIAC
20 DIAB
22 DIAA
23 DIA9
24 DIA8
25 DIA7
26 DIA6
27 DIA5
28 DIA4
29 DIA3
30 DIA2
32 DIA1
33 DIA0
49 ID5
48 ID4
47 ID3
45 ID2
44 ID1
43 ID0
53 RST
58 DIO
57 ADR
52 CKD
56 CKX
55 CS
50
93 TF
94 TE
95 TD
96 TC
97 TB
98 TA
99 T9
100 T8
102 T7
103 T6
104 T5
105 T4
107 T3
108 T2
109 T1
110 T0
54 TEST
39 W0
40 W1
42 W2
OEYL 92
DOYC 90
DOYB 89
DOYA 88
DOY9 87
DOY8 86
DOY7 85
DOY6 84
DOY5 83
DOY4 82
DOY3 80
DOY2 79
DOY1 78
DOY0 77
OEXL 59
DOXC 75
DOXB 74
DOXA 73
DOX9 72
DOX8 70
DOX7 69
DOX6 68
DOX5 67
DOX4 66
DOX3 65
DOX2 64
DOX1 63
DOX0 62

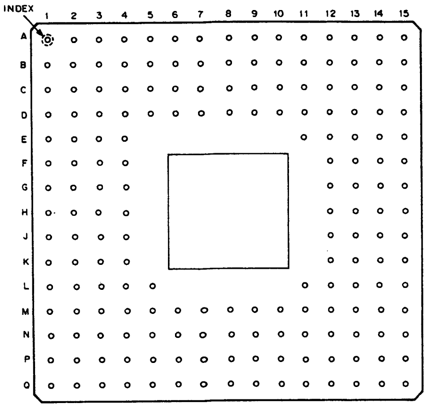
INPUT
ADR ; SERIAL ADDRESS
CK ; SYSTEM CLOCK
CKD ; SERIAL INTERFACE CLOCK
CKX ; SWITCHING TIMING PULSE
CS ; CHIP SELECT (LOW : ACTIVE)
DIAA – DIAD, DIA0 – DIA9 ; DATA A IN
DIBA – DIBD, DIB0 – DIB9 ; DATA B IN
RST ; RESET
ID0 – ID5 ; IC ADDRESS SELECT
SIA, SIB ; SIGN BIT OF "A", "B" IN
OEXL, OEYL ; ENABLE CONTROL OF "X", "Y" OUT (LOW : ENABLE)
TA – TF, T0 – T9 ; TEST TERMINAL
W0 – W2 ; MODE SELECT FOR TEST

OUTPUT
DOXA – DOXC, DOX0 – DOX9 ; DATA X OUT
DOYA – DOYC, DOY0 – DOY9 ; DATA Y OUT

INPUT/OUTPUT
DIO ; SERIAL DATA

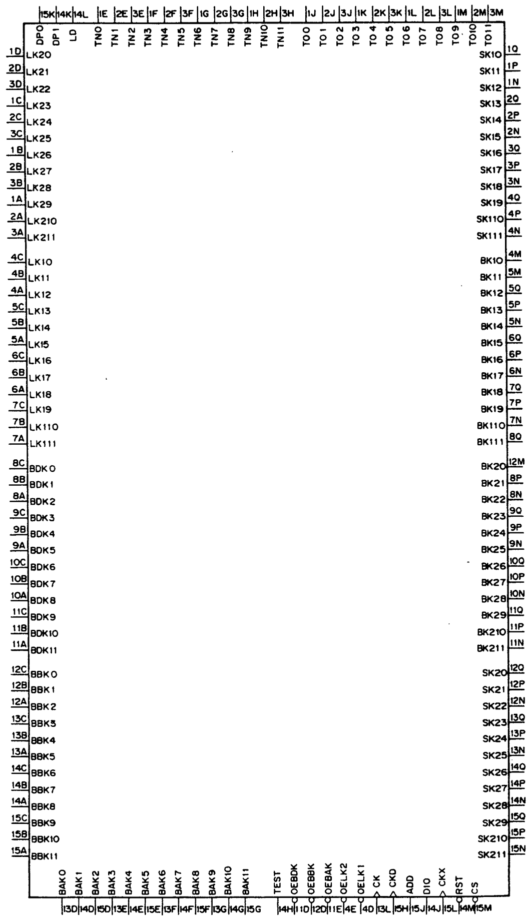

SIA
DIAA – DIAD
DIA0 – DIA9
(17, 22-18, 33,32,30-23)
15
1X1 (ABSOLUTE)
CLIP
GAIN
LIMITER
INVERTER
LPF
REGISTER
REGISTER
SERIAL DATA (REG. VALUE)
MODE CONTROL
NAM
(1)
(2)
(3)
13
DOXA – DOXC
DOX0 – DOX9
(73-75 62-70,72)
SIB
DIBA – DIBD
DIB0 – DIB9
(4-2, 118,119, 15,12,10-5)
15
1X1 (ABSOLUTE)
CLIP
GAIN
LIMITER
INVERTER
LPF
REGISTER
REGISTER
13
DOYA – DOYC
DOY0 – DOY9
(88-90, 77-80,82-87)

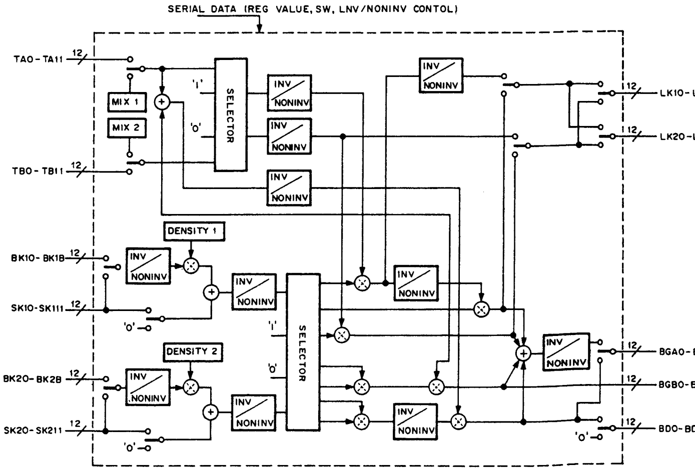
CXD8066G (SONY)
C-MOS KEY CONTROL
– BOTTOM VIEW –


INDEX
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A
B
C
D
E
F
G
H
J
K
L
M
N
P
Q

VDD = + 5V

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1A	O	LK29	1D	O	LK20	13H	–	NC	2N	I	SK15
2A	O	LK210	2D	O	LK21	14H	I	TEST	3N	I	SK18
3A	O	LK211	3D	O	LK22	15H	I	CKD	4N	I	SK111
4A	O	LK12	4D	I	OELK1	1J	I	TO0	5N	I	BK14
5A	O	LK15	5D	–	GND	2J	I	TO1	6N	I	BK17
6A	O	LK18	6D	–	GND	3J	I	TO2	7N	I	BK110
7A	O	LK111	7D	–	VDD	4J	–	VDD	8N	I	BK22
8A	O	BDK2	8D	–	GND	12J	–	VDD	9N	I	BK25
9A	O	BDK5	9D	–	VDD	13J	–	NC	10N	I	BK28
10A	O	BDK8	10D	–	GND	14J	I/O	DIO	11N	I	BK211
11A	O	BDK11	11D	I	OEBDK	15J	I	ADR	12N	I	SK22
12A	O	BBK2	12D	I	OEBBK	1K	I	TO3	13N	I	SK25
13A	O	BBK5	13D	O	BAK0	2K	I	TO4	14N	I	SK28
14A	O	BBK8	14D	O	BAK1	3K	I	TO5	15N	I	SK211
15A	O	BBK11	15D	O	BAK2	4K	–	GND	1P	I	SK11
1B	O	LK26	1E	I	TN0	12K	–	GND	2P	I	SK14
2B	O	LK27	2E	I	TN1	13K	–	NC	3P	I	SK17
3B	O	LK28	3E	I	TN2	14K	O	DP1	4P	I	SK110
4B	O	LK11	4E	I	OELK2	15K	O	DP0	5P	I	BK13
5B	O	LK14	11E	I	OEBAK	1L	I	TO6	6P	I	BK16
6B	O	LK17	12E	–	GND	2L	I	TO7	7P	I	BK19
7B	O	LK110	13E	O	BAK3	3L	I	TO8	8P	I	BK21
8B	O	BDK1	14E	O	BAK4	4L	–	GND	9P	I	BK24
9B	O	BDK4	15E	O	BAK5	5L	–	NC	10P	I	BK27
10B	O	BDK7	1F	I	TN3	11L	–	NC	11P	I	BK210
11B	O	BDK10	2F	I	TN4	12L	–	NC	12P	I	SK21
12B	O	BBK1	3F	I	TN5	13L	I	CK	13P	I	SK24
13B	O	BBK4	4F	–	GND	14L	I	LD	14P	I	SK27
14B	O	BBK7	12F	–	GND	15L	I	CKX	15P	I	SK210
15B	O	BBK10	13F	O	BAK6	1M	I	TO9	1Q	I	SK10
1C	O	LK23	14F	O	BAK7	2M	I	TO10	2Q	I	SK13
2C	O	LK24	15F	O	BAK8	3M	I	TO11	3Q	I	SK16
3C	O	LK25	1G	I	TN6	4M	I	BK10	4Q	I	SK19
4C	O	LK10	2G	I	TN7	5M	I	BK11	5Q	I	BK12
5C	O	LK13	3G	I	TN8	6M	–	GND	6Q	I	BK15
6C	O	LK16	4G	–	VDD	7M	–	VDD	7Q	I	BK18
7C	O	LK19	12G	–	VDD	8M	–	GND	8Q	I	BK11
8C	O	BDK0	13G	O	BAK9	9M	–	VDD	9Q	I	BK23
9C	O	BDK3	14G	O	BAK10	10M	–	GND	10Q	I	BK26
10C	O	BDK6	15G	O	BAK11	11M	–	GND	11Q	I	BK29
11C	O	BDK9	1H	I	TN9	12M	I	BK20	12Q	I	SK20
12C	O	BBK0	2H	I	TN10	13M	–	NC	13Q	I	SK23
13C	O	BBK3	3H	I	TN11	14M	I	RST	14Q	I	SK26
14C	O	BBK6	4H	–	GND	15M	I	CS	15Q	I	SK29
15C	O	BBK9	12H	–	GND	1N	I	SK12			


15K DP0
14K DP1
14L LD
1E TN0
2E TN1
3E TN2
1F TN3
2F TN4
3F TN5
1G TN6
2G TN7
3G TN8
1H TN9
2H TN10
3H TN11
1J TO0
2J TO1
3J TO2
1K TO3
2K TO4
3K TO5
1L TO6
2L TO7
3L TO8
1M TO9
2M TO10
3M TO11
1D LK20
2D LK21
3D LK22
1C LK23
2C LK24
3C LK25
1B LK26
2B LK27
3B LK28
1A LK29
2A LK210
3A LK211
4C LK10
4B LK11
4A LK12
5C LK13
5B LK14
5A LK15
6C LK16
6B LK17
6A LK18
7C LK19
7B LK110
7A LK111
8C BDK0
8B BDK1
8A BDK2
9C BDK3
9B BDK4
9A BDK5
10C BDK6
10B BDK7
10A BDK8
11C BDK9
11B BDK10
11A BDK11
12C BBK0
12B BBK1
12A BBK2
13C BBK3
13B BBK4
13A BBK5
14C BBK6
14B BBK7
14A BBK8
15C BBK9
15B BBK10
15A BBK11
SK10 1Q
SK11 1P
SK12 1N
SK13 2Q
SK14 2P
SK15 2N
SK16 3Q
SK17 3P
SK18 3N
SK19 4Q
SK110 4P
SK111 4N
BK10 4M
BK11 5M
BK12 5Q
BK13 5P
BK14 5N
BK15 6Q
BK16 6P
BK17 6N
BK18 7Q
BK19 7P
BK110 7N
BK111 8Q
BK20 12M
BK21 8P
BK22 8N
BK23 9Q
BK24 9P
BK25 9N
BK26 10Q
BK27 10P
BK28 10N
BK29 11Q
BK210 11P
BK211 11N
SK20 12Q
SK21 12P
SK22 12N
SK23 13Q
SK24 13P
SK25 13N
SK26 14Q
SK27 14P
SK28 14N
SK29 15Q
SK210 15P
SK211 15N
BAK0 13D
BAK1 14D
BAK2 15D
BAK3 13E
BAK4 14E
BAK5 15E
BAK6 13F
BAK7 14F
BAK8 15F
BAK9 13G
BAK10 14G
BAK11 15G
TEST 14H
OEBDK 11D
OEBBK 12D
OEBAK 11E
OELK2 4E
OELK1 4D
CK 13L
CKD 15H
ADD 15J
DIO 14J
CKX 15L
RST 14M
CS 15M


SERIAL DATA (REG VALUE, SW, LNV/NONINV CONTOL)
TA0 - TA11
TB0 - TB11
12
MIX 1
MIX 2
'1'
'0'
SELECTOR
INV
NONINV
DENSITY 1
DENSITY 2
BK10 - BK1B
SK10 - SK111
BK20 - BK2B
SK20 - SK211
LK10 - LK111
LK20 - LK211
BGA0 - BGA11
BGB0 - BGB11
BD0 - BD11

INPUT

ADR	; SERIAL ADDRESS
BK10 – BK111	; DATA INPUT BK1
BK20 – BK211	; DATA INPUT BK2
CK	; SYSTEM CLOCK
CKD	; SERIAL INTERFACE PULSE
CKX	; SWITCHING TIMING PULSE
CS	; CHIP SELECT
LD	; LOAD (＊1)
OEBAK	; ENABLE CONTROL OF BGA OUT (LOW : ENABLE)
OEBBK	; ENABLE CONTROL OF BGB OUT (LOW : ENABLE)
OEBDK	; ENABLE CONTROL OF BD OUT (LOW : ENABLE)
OELK1, OELK0	; ENABLE CONTROL OF LK OUT (LOW : ENABLE)
SK10 – SK111	; DATA INPUT SK1
SK20 – SK211	; DATA INPUT SK2
TEST	; TEST MODE (HIGH : TEST)
TN0 – TN11	; DATA INPUT TN
TO0 – TO11	; DATA INPUT TO

OUTPUT

BAK0 – BAK11	; DATA OUTPUT BAK
BBK0 – BBK11	; DATA OUTPUT BBK
BDK0 – BDK11	; DATA OUTPUT BDK
DP0 – DP1	; TIMING PULSE (＊1)
LK10 – LK111	; DATA OUTPUT LK1
LK20 – LK211	; DATA OUTPUT LK2

INPUT/OUTPUT

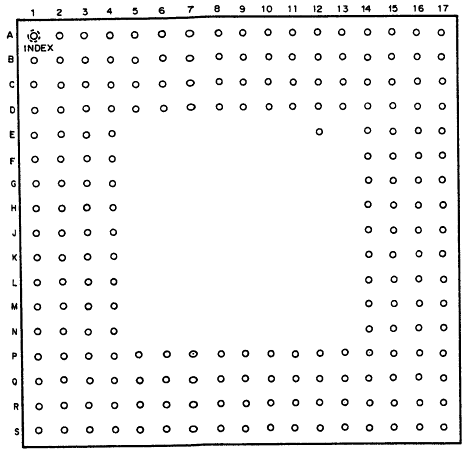
DIO	; SERIAL DATA

NOTE : ＊1 ········· TIMING-GENERATOR

CXD8067G (SONY)

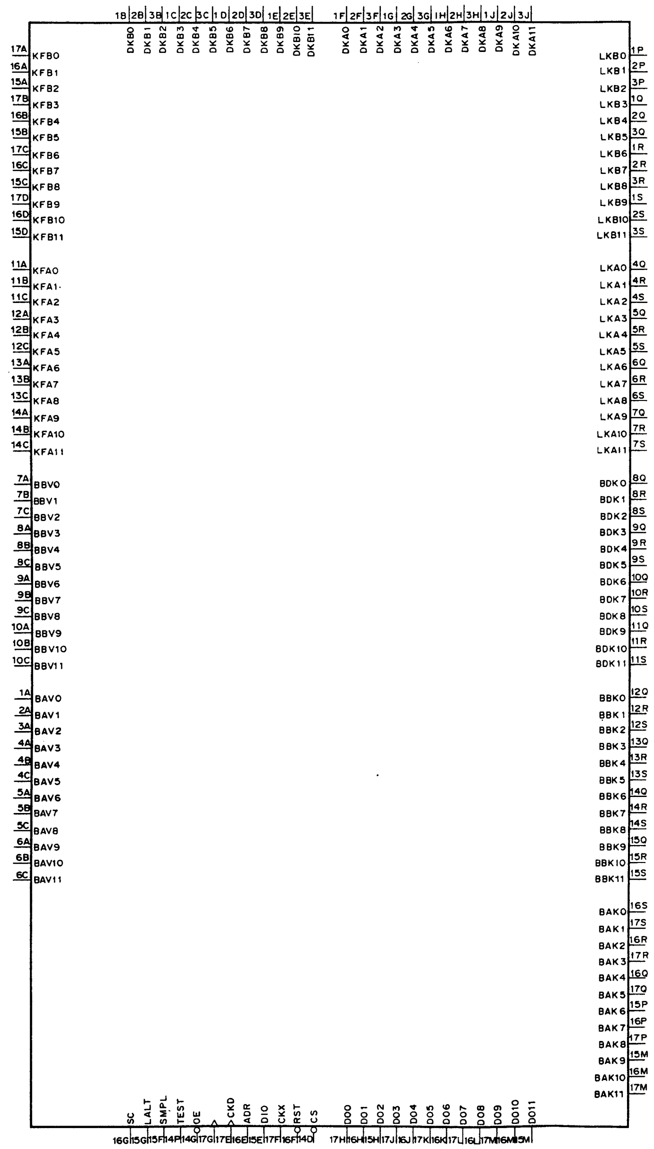
C-MOS MULTIPLIER

– BOTTOM VIEW –


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
A B C D E F G H J K L M N P Q R S
INDEX

(VDD = + 5V)

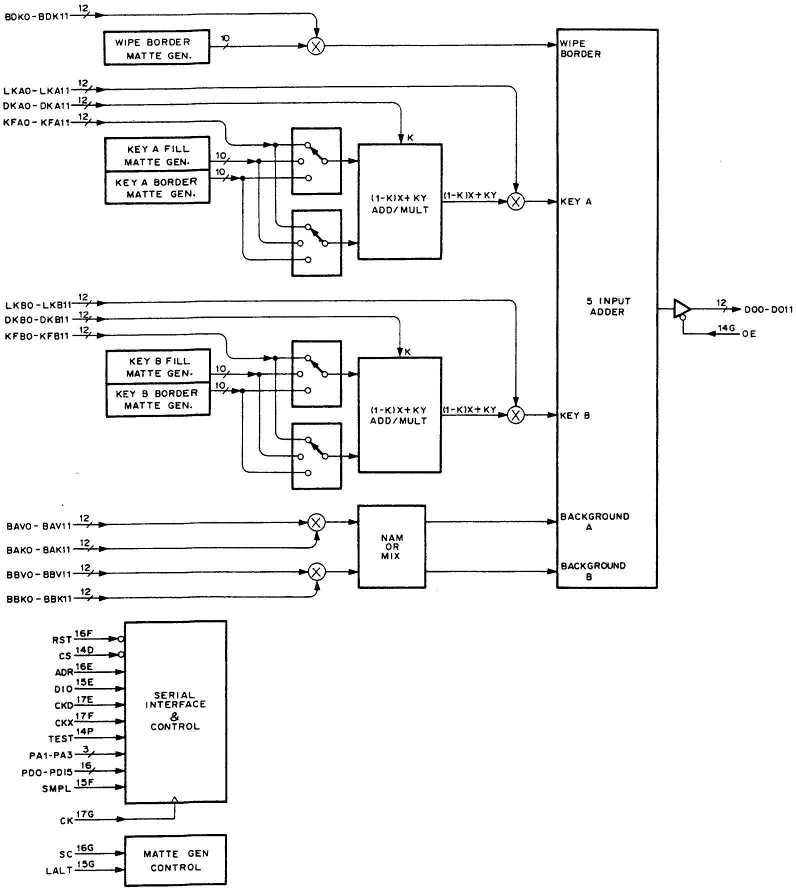
PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1A	I	BAV0	3J	I	DKA11	7A	I	BBV0	12C	I	KFA5	15L	I	PA3
1B	I	DKB0	3K	I	PD2	7B	I	BBV1	12D	–	GND	15M	O	DO11
1C	I	DKB3	3L	I	PD5	7C	I	BBV2	12E	–	NC	15N	I	BAK9
1D	I	DKB6	3M	I	PD9	7D	–	NC	12P	–	VDD	15P	I	BAK6
1E	I	DKB9	3N	I	PD12	7P	I	PD14	12Q	I	BBK0	15Q	I	BBK9
1F	I	DKA0	3P	I	LKB2	7Q	I	LKA9	12R	I	BBK1	15R	I	BBK10
1G	I	DKA3	3Q	I	LKB5	7R	I	LKA10	12S	I	BBK2	15S	I	BBK11
1H	I	DKA6	3R	I	LKB8	7S	I	LKA11	13A	I	KFA6	16A	I	KFB1
1J	I	DKA9	3S	I	LKB11	8A	I	BBV3	13B	I	KFA7	16B	I	KFB4
1K	I	PD0	4A	I	BAV3	8B	I	BBV4	13C	I	KFA8	16C	I	KFB7
1L	I	PD3	4B	I	BAV4	8C	I	BBV5	13D	–	VDD	16D	I	KFB10
1M	I	PD7	4C	I	BAV5	8D	–	GND	13P	–	GND	16E	I	ADR
1N	I	PD10	4D	–	NC	8P	–	VDD	13Q	I	BBK3	16F	I	RST
1P	I	LKB0	4E	–	VDD	8Q	I	BDK0	13R	I	BBK4	16G	I	SC
1Q	I	LKB3	4F	–	GND	8R	I	BDK1	13S	I	BBK5	16H	O	DO1
1R	I	LKB6	4G	–	GND	8S	I	BDK2	14A	I	KFA9	16J	O	DO4
1S	I	LKB9	4H	–	VDD	9A	I	BBV6	14B	I	KFA10	16K	O	DO6
2A	I	BAV1	4J	–	GND	9B	I	BBV7	14C	I	KFA11	16L	O	DO8
2B	I	DKB1	4K	–	GND	9C	I	BBV8	14D	I	CS	16M	O	DO10
2C	I	DKB4	4L	I	PD6	9D	–	GND	14E	–	GND	16N	I	BAK10
2D	I	DKB7	4M	–	VDD	9P	–	GND	14F	–	VDD	16P	I	BAK7
2E	I	DKB10	4N	–	GND	9Q	I	BDK3	14G	I	OE	16Q	I	BAK4
2F	I	DKA1	4P	I	PD13	9R	I	BDK4	14H	–	GND	16R	I	BAK2
2G	I	DKA4	4Q	I	LKA0	9S	I	BDK5	14J	–	GND	16S	I	BAK0
2H	I	DKA7	4R	I	LKA1	10A	I	BBV9	14K	–	VDD	17A	I	KFB0
2J	I	DKA10	4S	I	LKA2	10B	I	BBV10	14L	–	GND	17B	I	KFB3
2K	I	PD1	5A	I	BAV6	10C	I	BBV11	14M	–	GND	17C	I	KFB6
2L	I	PD4	5B	I	BAV7	10D	–	VDD	14N	–	VDD	17D	I	KFB9
2M	I	PD8	5C	I	BAV8	10P	–	GND	14P	I	TEST	17E	I	CKD
2N	I	PD11	5D	–	GND	10Q	I	BDK6	14Q	I	BBK6	17F	I	CKX
2P	I	LKB1	5P	–	VDD	10R	I	BDK7	14R	I	BBK7	17G	I	CK
2Q	I	LKB4	5Q	I	LKA3	10S	I	BDK8	14S	I	BBK8	17H	O	DO0
2R	I	LKB7	5R	I	LKA4	11A	I	KFA0	15A	I	KFB2	17J	O	DO3
2S	I	LKB10	5S	I	LKA5	11B	I	KFA1	15B	I	KFB5	17K	O	DO5
3A	I	BAV2	6A	I	BAV9	11C	I	KFA2	15C	I	KFB8	17L	O	DO7
3B	I	DKB2	6B	I	BAV10	11D	–	NC	15D	I	KFB11	17M	O	DO9
3C	I	DKB5	6C	I	BAV11	11P	I	PD15	15E	I/O	DIO	17N	I	BAK11
3D	I	DKB8	6D	–	VDD	11Q	I	BDK9	15F	I	SMPL	17P	I	BAK8
3E	I	DKB11	6P	–	GND	11R	I	BDK10	15G	I	LALT	17Q	I	BAK5
3F	I	DKA2	6Q	I	LKA6	11S	I	BDK11	15H	O	DO2	17R	I	BAK3
3G	I	DKA5	6R	I	LKA7	12A	I	KFA3	15J	I	PA1	17S	I	BAK1
3H	I	DKA8	6S	I	LKA8	12B	I	KFA4	15K	I	PA2			


1B 2B 3B 1C 2C 3C 1D 2D 3D 1E 2E 3E
DKB0 DKB1 DKB2 DKB3 DKB4 DKB5 DKB6 DKB7 DKB8 DKB9 DKB10 DKB11
1F 2F 3F 1G 2G 3G 1H 2H 3H 1J 2J 3J
DKA0 DKA1 DKA2 DKA3 DKA4 DKA5 DKA6 DKA7 DKA8 DKA9 DKA10 DKA11
17A KFB0
16A KFB1
15A KFB2
17B KFB3
16B KFB4
15B KFB5
17C KFB6
16C KFB7
15C KFB8
17D KFB9
16D KFB10
15D KFB11
11A KFA0
11B KFA1
11C KFA2
12A KFA3
12B KFA4
12C KFA5
13A KFA6
13B KFA7
13C KFA8
14A KFA9
14B KFA10
14C KFA11
7A BBV0
7B BBV1
7C BBV2
8A BBV3
8B BBV4
8C BBV5
9A BBV6
9B BBV7
9C BBV8
10A BBV9
10B BBV10
10C BBV11
1A BAV0
2A BAV1
3A BAV2
4A BAV3
4B BAV4
4C BAV5
5A BAV6
5B BAV7
5C BAV8
6A BAV9
6B BAV10
6C BAV11
LKB0 1P
LKB1 2P
LKB2 3P
LKB3 1Q
LKB4 2Q
LKB5 3Q
LKB6 1R
LKB7 2R
LKB8 3R
LKB9 1S
LKB10 2S
LKB11 3S
LKA0 4Q
LKA1 4R
LKA2 4S
LKA3 5Q
LKA4 5R
LKA5 5S
LKA6 6Q
LKA7 6R
LKA8 6S
LKA9 7Q
LKA10 7R
LKA11 7S
BDK0 8Q
BDK1 8R
BDK2 8S
BDK3 9Q
BDK4 9R
BDK5 9S
BDK6 10Q
BDK7 10R
BDK8 10S
BDK9 11Q
BDK10 11R
BDK11 11S
BBK0 12Q
BBK1 12R
BBK2 12S
BBK3 13Q
BBK4 13R
BBK5 13S
BBK6 14Q
BBK7 14R
BBK8 14S
BBK9 15Q
BBK10 15R
BBK11 15S
BAK0 16S
BAK1 17S
BAK2 16R
BAK3 17R
BAK4 16Q
BAK5 17Q
BAK6 15P
BAK7 16P
BAK8 17P
BAK9 15M
BAK10 16M
BAK11 17M
SC LALT SMPL TEST OE CKD ADR DIO CKX RST CS
16G 15G 15F 14P 14G 17G 17E 16E 15E 17F 16F 14D
DO0 DO1 DO2 DO3 DO4 DO5 DO6 DO7 DO8 DO9 DO10 DO11
17H 16H 15H 17J 16J 17K 16K 17L 16L 17M 16M 15M

INPUT
ADR ; SERIAL ADDRESS
BAK0 – BAK11 ; 12 BIT DIGITAL BACKGROUND A KEY IN
BAV0 – BAV11 ; 12 BIT DIGITAL BACKGROUND A VIDEO IN
BBK0 – BBK11 ; 12 BIT DIGITAL BACKGROUND B KEY IN
BBV0 – BBV11 ; 12 BIT DIGITAL BACKGROUND B VIDEO IN
BDK0 – BDK11 ; 12 BIT DIGITAL WIPE BORDER KEY IN
CK ; SYSTEM CLOCK
CKD ; SERIAL INTERFACE CLOCK
CKX ; SWITCHING TIMING PULSE
CS ; CHIP SELECT (LOW : ACTIVE)
DKA0 – DKA11 ; 12 BIT DIGITAL DELAY KEY A IN
DKB0 – DKB11 ; 12 BIT DIGITAL DELAY KEY B IN
KFA0 – KFA11 ; 12 BIT DIGITAL KEY A FILL VIDEO IN
KFB0 – KFB11 ; 12 BIT DIGITAL KEY B FILL VIDEO IN
LALT ; LINE ALTERNATE PULSE
  < FOR D II PAL >
    (HIGH : EVEN, LOW : ODD)
  < FOR D II NTSC >
    (HIGH : CONTINUOUS)
LKA0 – LKA11 ; 12 BIT DIGITAL LAST KEY A IN
LKB0 – LKB11 ; 12 BIT DIGITAL LAST KEY B IN
OE ; OUTPUT ENABLE (LOW : ENABLE)
P1 – P3 ; PARALLEL ADDRESS IN FOR TEST OF SERIAL COMMUNICATION
PD0 – PD15 ; PARALLEL DATA IN FOR TEST OF SERIAL COMMUNICATION
RST ; RESET PULSE (LOW : RESET REGISTER)
SC ; SUBCARRIER PULSE
SMPL ; SAMPLING PULSE
TEST ; TEST MODE (HIGH : TEST, LOW : NORMAL)

OUTPUT
DO0 – DO11 ; 12 BIT DIGITAL VIDEO OUT

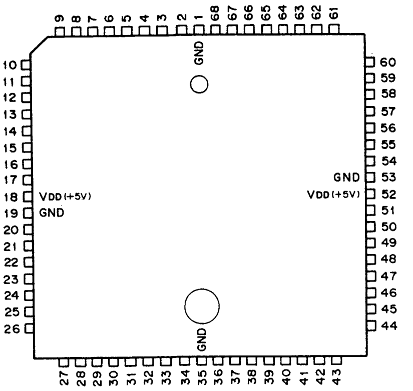
INPUT/OUTPUT
DIO ; SERIAL DATA


BDK0-BDK11
12
WIPE BORDER MATTE GEN.
10
WIPE BORDER
LKA0-LKA11
12
DKA0-DKA11
12
KFA0-KFA11
12
KEY A FILL MATTE GEN.
KEY A BORDER MATTE GEN.
10
10
K
(1-K)X+KY ADD/MULT
(1-K)X+KY
KEY A
LKB0-LKB11
12
DKB0-DKB11
12
KFB0-KFB11
12
KEY B FILL MATTE GEN.
KEY B BORDER MATTE GEN.
10
10
K
(1-K)X+KY ADD/MULT
(1-K)X+KY
KEY B
5 INPUT ADDER
12
DO0-DO11
14G
OE
BAV0-BAV11
12
BAK0-BAK11
12
BBV0-BBV11
12
BBK0-BBK11
12
NAM OR MIX
BACKGROUND A
BACKGROUND B
RST 16F
CS 14D
ADR 16E
DIO 15E
CKD 17E
CKX 17F
TEST 14P
PA1-PA3 3
PD0-PD15 16
SMPL 15F
CK 17G
SERIAL INTERFACE & CONTROL
SC 16G
LALT 15G
MATTE GEN CONTROL

CXD8110K (SONY)

C-MOS SERIAL INTERFACE TRANSMITTER FOR NTSC/PAL

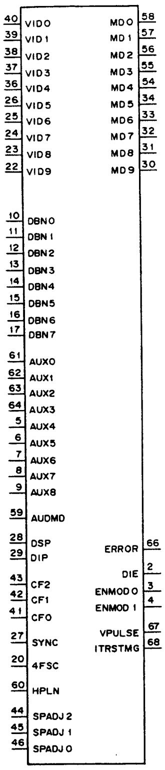
– TOP VIEW –


9
8
7
6
5
4
3
2
1
68
67
66
65
64
63
62
61
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
60
59
58
57
56
55
54
53
52
51
50
49
48
47
46
45
44
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
GND
GND
VDD(+5V)
GND
VDD(+5V)
GND

(V_{DD} = + 5V)

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	–	GND	18	–	V_{DD}	35	–	GND	52	–	V_{DD}
2	O	DIE	19	–	GND	36	I	VID4	53	–	GND
3	O	ENMOD0	20	I	4FSC	37	I	VID3	54	O	MD4
4	O	ENMOD1	21	I	∗ VAREN	38	I	VID2	55	O	MD3
5	I	AUX4	22	I	VID9	39	I	VID1	56	O	MD2
6	I	AUX5	23	I	VID8	40	I	VID0	57	O	MD1
7	I	AUX6	24	I	VID7	41	I	CF2	58	O	MD0
8	I	AUX7	25	I	VID6	42	I	CF1	59	I	AUDMD
9	I	AUX8	26	I	VID5	43	I	CF0	60	I	HPLN
10	I	DBN7	27	I	SYNC	44	I	SPADJ2	61	I	AUX0
11	I	DBN6	28	I	DSP	45	I	SPADJ1	62	I	AUX1
12	I	DBN5	29	I	DIP	46	I	SPADJ0	63	I	AUX2
13	I	DBN4	30	O	MD9	47	I	∗ ENM1	64	I	AUX3
14	I	DBN3	31	O	MD8	48	I	∗ ENM0	65	I	∗ OEPOLSEL
15	I	DBN2	32	O	MD7	49	I	∗ SWCH	66	O	ERROR
16	I	DBN1	33	O	MD6	50	I	∗ EXCH	67	O	VPULSE
17	I	DBN0	34	O	MD5	51	I	∗ RESET	68	O	ITRSTMG

∗ ;USED FOR DEVICE TEST


40 VID0
39 VID1
38 VID2
37 VID3
36 VID4
26 VID5
25 VID6
24 VID7
23 VID8
22 VID9
10 DBN0
11 DBN1
12 DBN2
13 DBN3
14 DBN4
15 DBN5
16 DBN6
17 DBN7
61 AUX0
62 AUX1
63 AUX2
64 AUX3
5 AUX4
6 AUX5
7 AUX6
8 AUX7
9 AUX8
59 AUDMD
28 DSP
29 DIP
43 CF2
42 CF1
41 CF0
27 SYNC
20 4FSC
60 HPLN
44 SPADJ2
45 SPADJ1
46 SPADJ0
MD0 58
MD1 57
MD2 56
MD3 55
MD4 54
MD5 34
MD6 33
MD7 32
MD8 31
MD9 30
ERROR 66
DIE 2
ENMOD0 3
ENMOD1 4
VPULSE 67
ITRSTMG 68

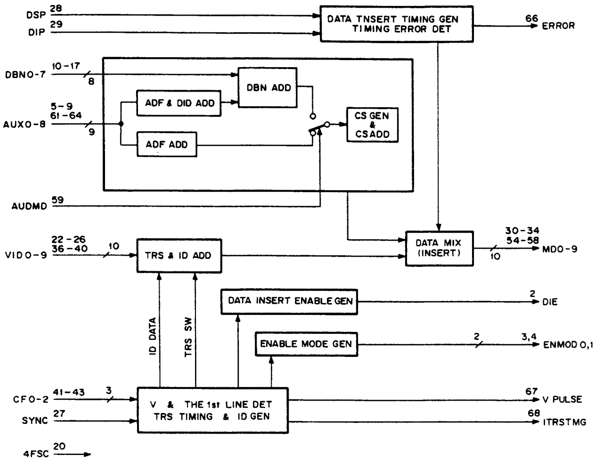
INPUT

4FSC ; SYSTEM CLOCK
AUDMD ; AUDIO MODE (SET TO HIGH)
AUX0-8 ; AUXILIARY DATA
CF0-2 ; COLOR FRAMING PULSE
DBN0-7 ; DATA BLOCK NO. FOR AUDIO MODE DATA
DIP ; DATA INSERT PULSE
DSP ; DATA START PULSE
HPLN ; NTSC/PAL SELECT (NTSC : LOW/PAL : HIGH)
SPADJ0-2 ; SYNC PHASE ADJUST
SYNC ; COMPOSITE SYNC
VID0-9 ; COMPOSITE DIGITAL VIDEO DATA

ENM0-1 ; USED FOR DEVICE TEST
SWCH ; USED FOR DEVICE TEST
EXCH ; USED FOR DEVICE TEST
RESET ; USED FOR DEVICE TEST
OEPOLSEL ; USED FOR DEVICE TEST
VAREN ; USED FOR DEVICE TEST

OUTPUT

DIE ; DATA INSERT ENABLE
ENMOD0,1 ; ENABLE MODE
ERROR ; ERROR FLAG
ITRS TMG ; INPUT TRS TIMING
MD0-9 ; MIXED DATA
VPULSE ; V PULSE (INDICATES THE FIELD START POINT)

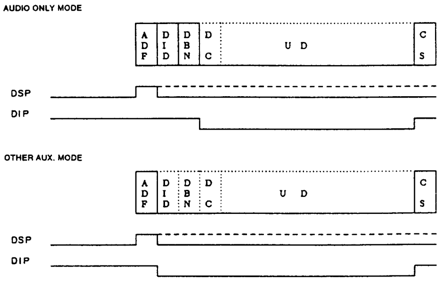

DSP 28
DIP 29
DATA TNSERT TIMING GEN
TIMING ERROR DET
66 ERROR
DBN0-7 10-17 8
DBN ADD
AUX0-8 5-9 61-64 9
ADF & DID ADD
ADF ADD
CS GEN & CSADD
AUDMD 59
VID0-9 22-26 36-40 10
TRS & ID ADD
DATA MIX (INSERT)
30-34 54-58 10 MD0-9
DATA INSERT ENABLE GEN
2 DIE
ID DATA
TRS SW
ENABLE MODE GEN
2 3,4 ENMOD 0,1
CF0-2 41-43 3
SYNC 27
V & THE 1st LINE DET
TRS TIMING & ID GEN
67 V PULSE
68 ITRSTMG
4FSC 20

INPUT TIMING DIAGRAM

Control Signals Relative to the Aux.data Characteristics

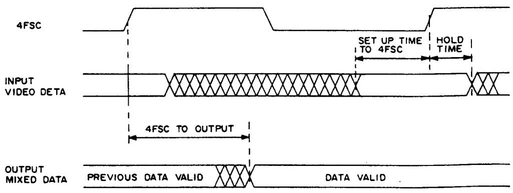
DSP and DIP Timing Relative to Aux.data.

The Aux.data which is shown with dotted line have to be prepared. And DSP requires at least 1 clock pulse width.


AUDIO ONLY MODE
A D F
D I D
D B N
D C
U D
C S
DSP
DIP
OTHER AUX. MODE
A D F
D I D
D B N
D C
U D
C S
DSP
DIP

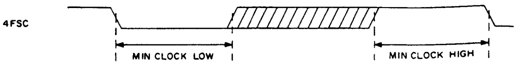
SWITCING CHARACTERISTICS

INPUT OUTPUT TIMING


4FSC
SET UP TIME TO 4FSC
HOLD TIME
INPUT VIDEO DETA
4FSC TO OUTPUT
OUTPUT MIXED DATA
PREVIOUS DATA VALID
DATA VALID

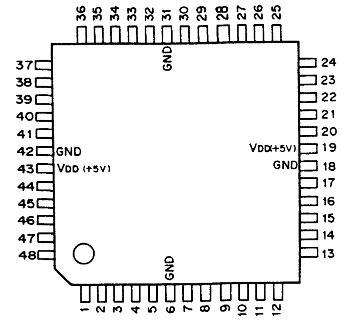
SET UP TIME TO 4FSC	0 ns
HOLD TIME	10 ns
4FSC TO OUTPUT	13 ns

CLOCK WAVEFORMS

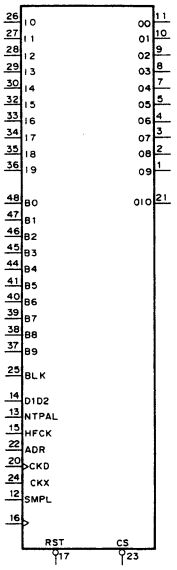

4FSC
MIN CLOCK LOW
MIN CLOCK HIGH

MIN CLOCK LOW	20 ns
MIN CLOCK HIGH	20 ns

CXD8189AQ (SONY) FLAT PACKAGE
C-MOS OUTPUT PROCESSOR
– TOP VIEW –


36 35 34 33 32 31 30 29 28 27 26 25
GND
37
38
39
40
41
42 GND
43 VDD (+5V)
44
45
46
47
48
24
23
22
21
20
VDD(+5V) 19
GND 18
17
16
15
14
13
GND
1 2 3 4 5 6 7 8 9 10 11 12

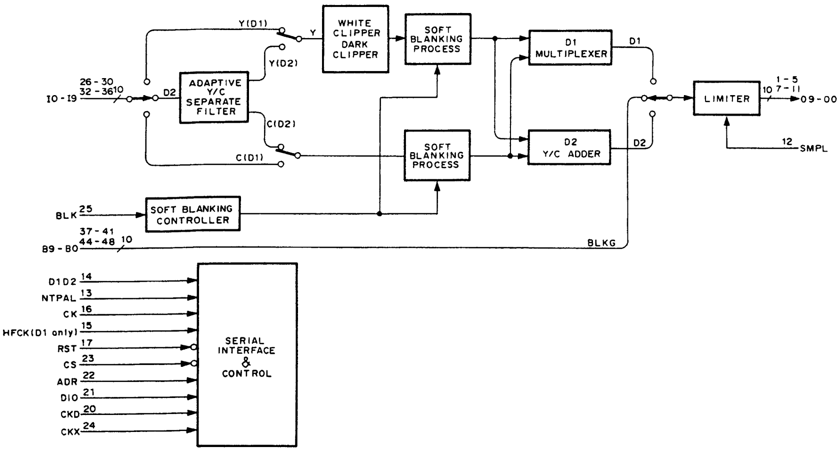
PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	O	O9	13	I	NTPAL	25	I	BLK	37	I	B9
2	O	O8	14	I	D1D2	26	I	I0	38	I	B8
3	O	O7	15	I	HFCK	27	I	I1	39	I	B7
4	O	O6	16	I	CK	28	I	I2	40	I	B6
5	O	O5	17	I	RST	29	I	I3	41	I	B5
6	–	GND	18	–	GND	30	I	I4	42	–	GND
7	O	O4	19	–	VDD	31	–	GND	43	–	VDD
8	O	O3	20	I	CKD	32	I	I5	44	I	B4
9	O	O2	21	I/O	DIO	33	I	I6	45	I	B3
10	O	O1	22	I	ADR	34	I	I7	46	I	B2
11	O	O0	23	I	CS	35	I	I8	47	I	B1
12	I	SMPL	24	I	CKX	36	I	I9	48	I	B0


26 I0
27 I1
28 I2
29 I3
30 I4
32 I5
33 I6
34 I7
35 I8
36 I9
48 B0
47 B1
46 B2
45 B3
44 B4
41 B5
40 B6
39 B7
38 B8
37 B9
25 BLK
14 D1D2
13 NTPAL
15 HFCK
22 ADR
20 CKD
24 CKX
12 SMPL
16
O0 11
O1 10
O2 9
O3 8
O4 7
O5 5
O6 4
O7 3
O8 2
O9 1
O10 21
RST 17
CS 23

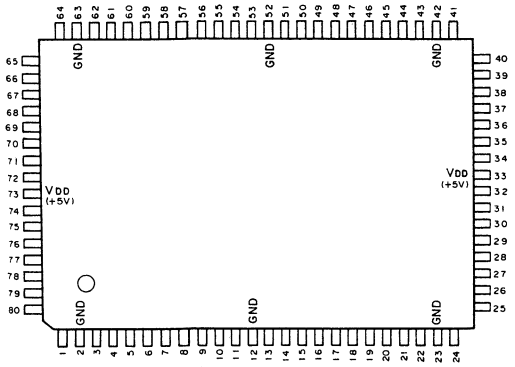
INPUT
ADR ; SERIAL ADDRESS
B0 – B9 ; 10 BIT DIGITAL BLANKING IN
BLK ; BLANKING GATE PULSE
CK ; SYSTEM CLOCK
CKD ; SERIAL INTERFACE CLOCK
CKX ; SWITCHING TIMING PULSE
CS ; CHIP SELECT (LOW : ACTIVE)
D1D2 ; D1/D2 FORMAT SELECT
(LOW : D1, HIGH : D2)
HFCK ; HALF CLOCK (13.5MHz) (ONLY D1 MODE)
I0 – I9 ; 10 BIT DIGITAL VIDEO IN (D1 OR D2 FORMAT)
NTPAL ; NTSC/PAL FORMAT SELECT (ONLY D2 MODE)
(LOW : D2 NTSC, HIGH : D2 PAL)
RST ; RESET PULSE (LOW : RESET)
SMPL ; SAMPLING PULSE FOR O OUTPUT (ʃ)

OUTPUT
O0 – O9 ; 10 BIT DIGITAL VIDEO OUT

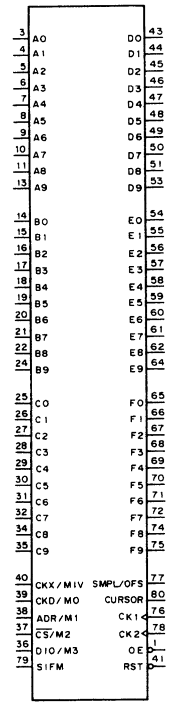
INPUT/OUTPUT
DIO ; SERIAL DATA


I0 - I9
26 - 30
32 - 36
10
D2
ADAPTIVE Y/C SEPARATE FILTER
Y(D1)
Y(D2)
C(D2)
C(D1)
Y
WHITE CLIPPER DARK CLIPPER
SOFT BLANKING PROCESS
SOFT BLANKING PROCESS
D1 MULTIPLEXER
D2 Y/C ADDER
D1
D2
LIMITER
1 - 5
7 - 11
10
09 - 00
12
SMPL
BLK 25
SOFT BLANKING CONTROLLER
B9 - B0
37 - 41
44 - 48
10
BLKG
D1D2 14
NTPAL 13
CK 16
HFCK(D1 only) 15
RST 17
CS 23
ADR 22
DIO 21
CKD 20
CKX 24
SERIAL INTERFACE & CONTROL

CXD8190Q (SONY) FLAT PACKAGE
C-MOS SUPER MULTIPLEX-DEMULTIPLEXER
- TOP VIEW -


GND
GND
GND
VDD (+5V)
VDD (+5V)
GND
GND
GND

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	OE	21	I/O	B7	41	I	RST	61	I/O	E7
2	–	GND	22	I/O	B8	42	–	GND	62	I/O	E8
3	I/O	A0	23	–	GND	43	I/O	D0	63	–	GND
4	I/O	A1	24	I/O	B9	44	I/O	D1	64	I/O	E9
5	I/O	A2	25	I/O	C0	45	I/O	D2	65	I/O	F0
6	I/O	A3	26	I/O	C1	46	I/O	D3	66	I/O	F1
7	I/O	A4	27	I/O	C2	47	I/O	D4	67	I/O	F2
8	I/O	A5	28	I/O	C3	48	I/O	D5	68	I/O	F3
9	I/O	A6	29	I	C4	49	I/O	D6	69	I	F4
10	I/O	A7	30	I	C5	50	I/O	D7	70	I	F5
11	I/O	A8	31	I	C6	51	I/O	D8	71	I	F6
12	–	GND	32	I	C7	52	–	GND	72	I	F7
13	I/O	A9	33	–	VDD	53	I/O	D9	73	–	VDD
14	I/O	B0	34	I	C8	54	I/O	E0	74	I	F8
15	I/O	B1	35	I	C9	55	I/O	E1	75	I	F9
16	I/O	B2	36	I/O	DIO/M3	56	I/O	E2	76	I	CK1
17	I/O	B3	37	I	CS/M2	57	I/O	E3	77	I	SMPL/OFS
18	I/O	B4	38	I	ADR/M1	58	I/O	E4	78	I	CK2
19	I/O	B5	39	I	CKD/M0	59	I/O	E5	79	I	SIFM
20	I/O	B6	40	I	CKX/MIV	60	I/O	E6	80	I	CURSOR

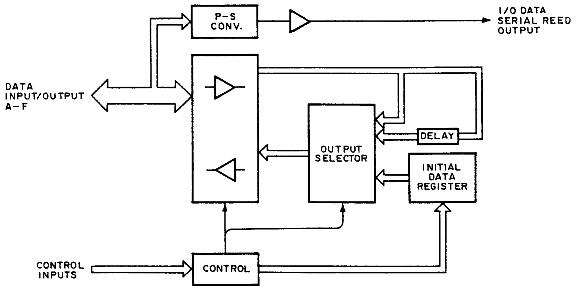

A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
B0
B1
B2
B3
B4
B5
B6
B7
B8
B9
C0
C1
C2
C3
C4
C5
C6
C7
C8
C9
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
E0
E1
E2
E3
E4
E5
E6
E7
E8
E9
F0
F1
F2
F3
F4
F5
F6
F7
F8
F9
CKX/MIV
CKD/MO
ADR/M1
CS/M2
DIO/M3
SIFM
SMPL/OFS
CURSOR
CK1
CK2
OE
RST

COMMON TERMINALS
A0 – A9 ; CHA 10 BIT DIGITAL INPUT/OUTPUT
B0 – B9 ; CHB 10 BIT DIGITAL INPUT/OUTPUT
C0 – C9 ; CHC 10 BIT DIGITAL INPUT/OUTPUT
CK1 ; SYSTEM CLOCK INPUT
CK2 ; SUB-CLOCK INPUT
CURSOR ; CURSOR INPUT
D0 – D9 ; CHD 10 BIT DIGITAL INPUT/OUTPUT
E0 – E9 ; CHE 10 BIT DIGITAL INPUT/OUTPUT
F0 – F9 ; CHF 10 BIT DIGITAL INPUT/OUTPUT
OE ; OUTPUT ENABLE INPUT (LOW : ENABLE)
RST ; RESET PULSE INPUT (LOW : RESET)
SIFM ; SERIAL INTERFACE MODE (SIF) / MANUAL MODE SELECT INPUT (LOW : SERIAL INTERFACE MODE, HIGH : MANUAL MODE)

TERMINALS OF MANUAL MODE
M0 – M3 ; MODE SELECT INPUT (4 BIT)
MIV ; MSB INVERT CONTROL INPUT (HIGH : INVERT MSB)
OFS ; CURSOR MSB INVERT CONTROL INPUT

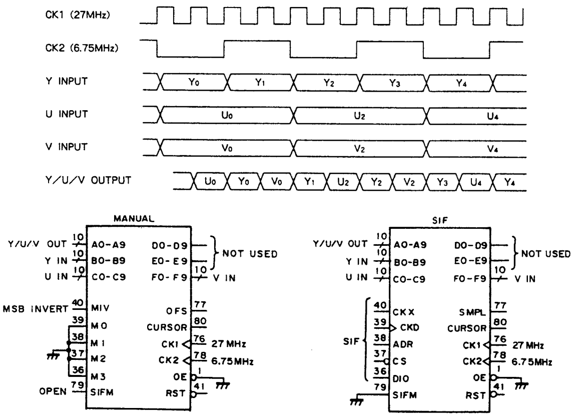
TERMINALS OF SIF MODE
ADR ; SERIAL ADDRESS INPUT
CKD ; SERIAL INTERFACE CLOCK INPUT
CKX ; SWITCHING TIMING PULSE INPUT
CS ; CHIP SELECT INPUT (LOW : ACTIVE)
DIO ; SERIAL DATA INPUT/OUTPUT
SMPL ; SAMPLING PULSE INPUT

BLOCK DIAGRAM

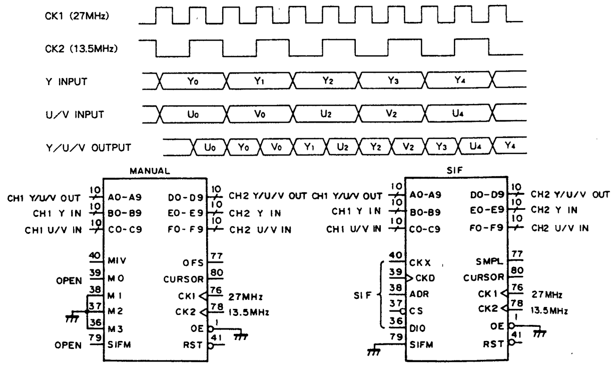

P-S CONV.
I/O DATA SERIAL REED OUTPUT
DATA INPUT/OUTPUT A-F
DELAY
OUTPUT SELECTOR
INITIAL DATA REGISTER
CONTROL INPUTS
CONTROL

FUNCTION OF MODE 0 – MODE 12

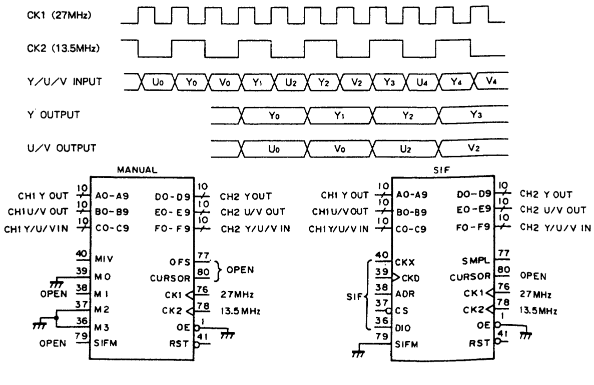
MODE 0 : D1 Y, U, V MULTIPLEXER


CK1 (27MHz)
CK2 (6.75MHz)
Y INPUT
U INPUT
V INPUT
Y/U/V OUTPUT
MANUAL
SIF
Y/U/V OUT
Y IN
U IN
MSB INVERT
OPEN
NOT USED
V IN
27 MHz
6.75MHz

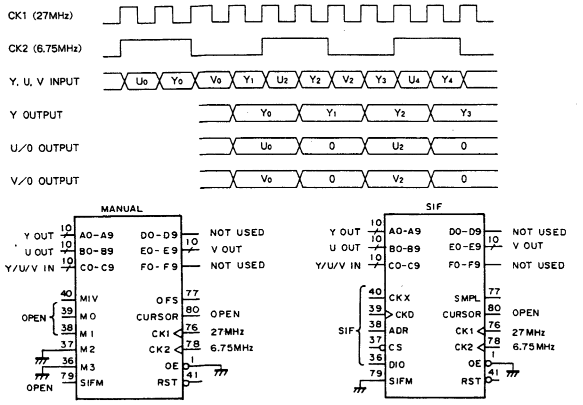
MODE 1 : D1 Y, U/V, MULTIPLEXER (2CH)


CK1 (27MHz)
CK2 (13.5MHz)
Y INPUT
U/V INPUT
Y/U/V OUTPUT
MANUAL
SIF
CH1 Y/U/V OUT
CH1 Y IN
CH1 U/V IN
CH2 Y/U/V OUT
CH2 Y IN
CH2 U/V IN
OPEN
27MHz
13.5MHz

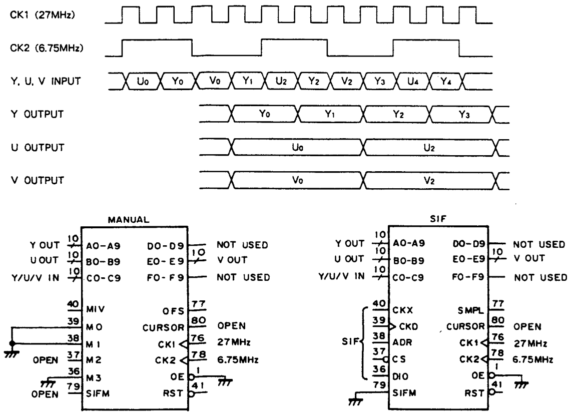
MODE 2 : D1 Y, U/V DEMULTIPLEXER (2CH)


CK1 (27MHz)
CK2 (13.5MHz)
Y/U/V INPUT
Y OUTPUT
U/V OUTPUT
MANUAL
SIF
CH1 Y OUT
CH1 U/V OUT
CH1 Y/U/V IN
CH2 Y OUT
CH2 U/V OUT
CH2 Y/U/V IN
OPEN
27MHz
13.5MHz

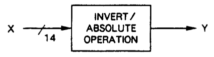
MODE 3 : D1 Y, U, V DEMULTIPLEXER (WITH 0 INSERT FUNCTION)


CK1 (27MHz)
CK2 (6.75MHz)
Y, U, V INPUT
Y OUTPUT
U/0 OUTPUT
V/0 OUTPUT
MANUAL
SIF
Y OUT
U OUT
Y/U/V IN
A0-A9
B0-B9
C0-C9
D0-D9
E0-E9
F0-F9
NOT USED
V OUT
OPEN
MIV
M0
M1
M2
M3
SIFM
OFS
CURSOR
CK1
CK2
OE
RST
27MHz
6.75MHz
CKX
CKD
ADR
CS
DIO
SMPL

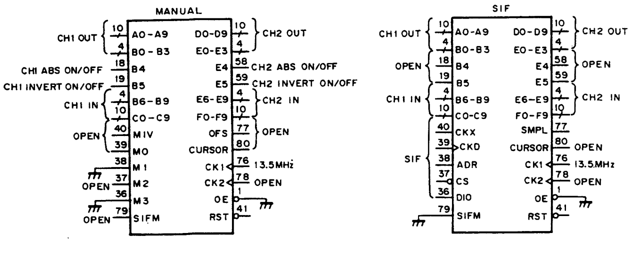
MODE 4 : D1 Y, U, V DEMULTIPLEXER


CK1 (27MHz)
CK2 (6.75MHz)
Y, U, V INPUT
Y OUTPUT
U OUTPUT
V OUTPUT
MANUAL
SIF
Y OUT
U OUT
Y/U/V IN
NOT USED
V OUT
OPEN
27MHz
6.75MHz

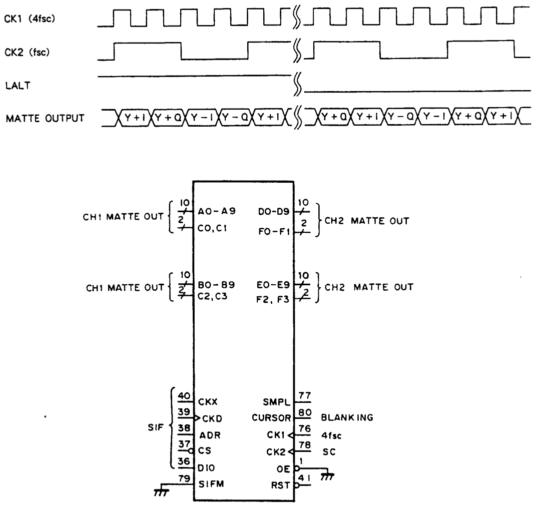
MODE 5 : ABSOLUTE OR INVERT VALUE OPERATION (2CH)

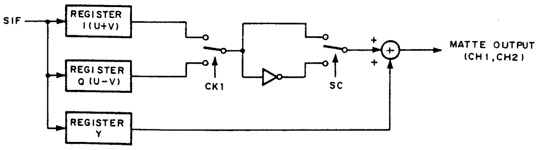

X
14
INVERT/ ABSOLUTE OPERATION
Y

$Y = X$ OR $\bar{X}$ OR $|X|$ OR $|\bar{X}|$

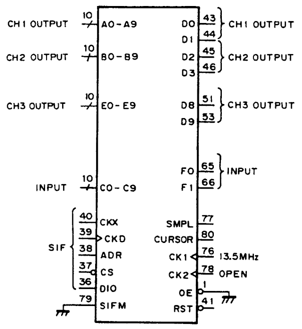

MANUAL
SIF
CH1 OUT
CH1 ABS ON/OFF
CH1 INVERT ON/OFF
CH1 IN
CH2 OUT
CH2 ABS ON/OFF
CH2 INVERT ON/OFF
CH2 IN
OPEN
13.5MHz

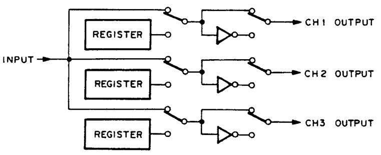
MODE 6 : D2 MATTE GENERATOR (2CH)


CK1 (4fsc)
CK2 (fsc)
LALT
MATTE OUTPUT
CH1 MATTE OUT
CH2 MATTE OUT
SIF
BLANKING
4fsc
SC

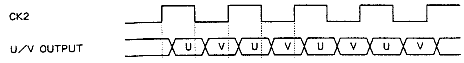

SIF
REGISTER I (U+V)
REGISTER Q (U-V)
REGISTER Y
CK1
SC
MATTE OUTPUT (CH1, CH2)

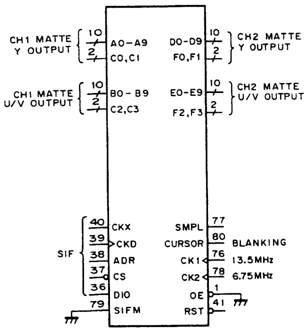
MODE 7 : WIPE/MIX TRANSITION CONTROLLER (3CH OUTPUTS)

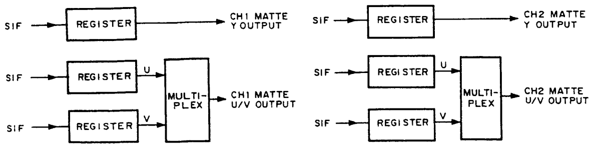

CH1 OUTPUT
CH2 OUTPUT
CH3 OUTPUT
INPUT
SIF
13.5MHz
OPEN


INPUT
REGISTER
REGISTER
REGISTER
CH1 OUTPUT
CH2 OUTPUT
CH3 OUTPUT

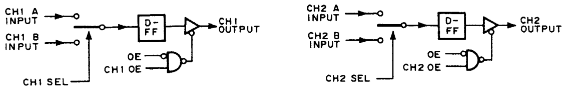
MODE 8 : D1 MATTE GENERATOR (2CH)

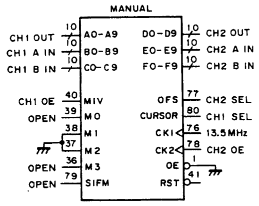

CK2
U/V OUTPUT
U
V
U
V
U
V
U
V


CH1 MATTE Y OUTPUT
10
2
A0-A9
C0,C1
D0-D9
F0,F1
CH2 MATTE Y OUTPUT
CH1 MATTE U/V OUTPUT
B0-B9
C2,C3
E0-E9
F2,F3
CH2 MATTE U/V OUTPUT
SIF
40 CKX
39 CKD
38 ADR
37 CS
36 DIO
79 SIFM
SMPL 77
CURSOR 80 BLANKING
CK1 76 13.5MHz
CK2 78 6.75MHz
OE 1
RST 41

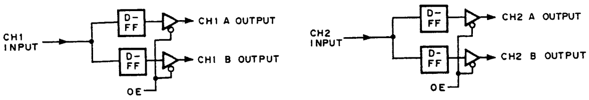

SIF
REGISTER
CH1 MATTE Y OUTPUT
SIF
REGISTER
CH2 MATTE Y OUTPUT
SIF
REGISTER
U
SIF
REGISTER
V
MULTI-PLEX
CH1 MATTE U/V OUTPUT
SIF
REGISTER
U
SIF
REGISTER
V
MULTI-PLEX
CH2 MATTE U/V OUTPUT

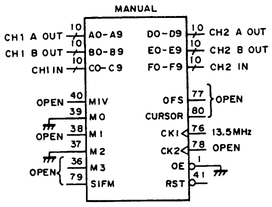
MODE 9 : 1 OF 2 SELECTOR (2CH)


CH1 A INPUT
CH1 B INPUT
D-FF
CH1 OUTPUT
OE
CH1 OE
CH1 SEL
CH2 A INPUT
CH2 B INPUT
D-FF
CH2 OUTPUT
OE
CH2 OE
CH2 SEL

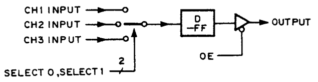

MANUAL
CH1 OUT 10 A0-A9
CH1 A IN 10 B0-B9
CH1 B IN 10 C0-C9
D0-D9 10 CH2 OUT
E0-E9 10 CH2 A IN
F0-F9 10 CH2 B IN
CH1 OE 40 MIV
OPEN 39 M0
38 M1
37 M2
OPEN 36 M3
OPEN 79 SIFM
OFS 77 CH2 SEL
CURSOR 80 CH1 SEL
CK1 76 13.5MHz
CK2 78 CH2 OE
OE 1
RST 41

MODE 10 : 1 TO 2 DISTRIBUTER (2CH)


CH1 INPUT
D-FF
CH1 A OUTPUT
D-FF
CH1 B OUTPUT
OE
CH2 INPUT
D-FF
CH2 A OUTPUT
D-FF
CH2 B OUTPUT
OE

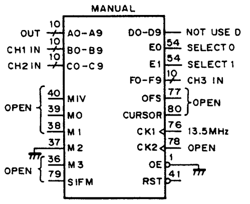

MANUAL
CH1 A OUT 10 A0-A9
CH1 B OUT 10 B0-B9
CH1 IN 10 C0-C9
D0-D9 10 CH2 A OUT
E0-E9 10 CH2 B OUT
F0-F9 10 CH2 IN
OPEN 40 MIV
39 M0
OPEN 38 M1
37 M2
OPEN 36 M3
79 SIFM
OFS 77 OPEN
CURSOR 80
CK1 76 13.5MHz
CK2 78 OPEN
OE 1
RST 41

MODE 11 : 1 OF 3 SELECTOR

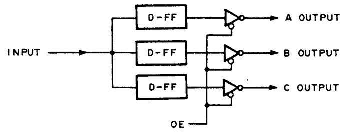

CH1 INPUT
CH2 INPUT
CH3 INPUT
D-FF
OUTPUT
OE
2
SELECT 0,SELECT 1

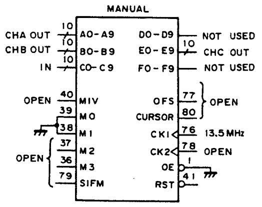
SELECT 1	SELECT 0	OUTPUT
0	0	CH1
0	1	CH2
1	0	CH3
1	1	0 OUT

0 ; LOW LEVEL
1 ; HIGH LEVEL

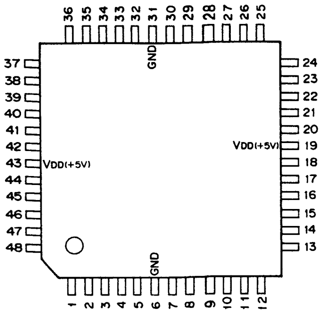

MANUAL
OUT 10 A0-A9
CH1 IN 10 B0-B9
CH2 IN 10 C0-C9
D0-D9 NOT USE D
E0 54 SELECT 0
E1 54 SELECT 1
F0-F9 10 CH3 IN
OPEN 40 MIV
39 M0
38 M1
37 M2
36 M3
OPEN 79 SIFM
OFS 77 OPEN
CURSOR 80
CK1 76 13.5MHz
CK2 78 OPEN
OE 1
RST 41

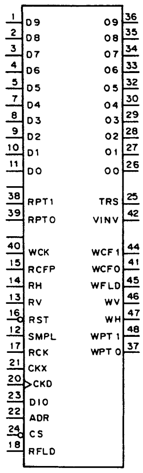
MODE 12 : 1 TO 3 DISTRIBUTER


INPUT
D-FF
A OUTPUT
D-FF
B OUTPUT
D-FF
C OUTPUT
OE


MANUAL
CHA OUT 10 A0-A9
CHB OUT 10 B0-B9
IN 10 C0-C9
D0-D9 NOT USED
E0-E9 10 CHC OUT
F0-F9 NOT USED
OPEN 40 MIV
39 M0
38 M1
37 M2
OPEN 36 M3
79 SIFM
OFS 77 OPEN
CURSOR 80
CK1 76 13.5MHz
CK2 78 OPEN
OE 1
RST 41

CXD8199Q (SONY) FLAT PACKAGE
C-MOS TBC CONTROL
– TOP VIEW –


36 35 34 33 32 31 30 29 28 27 26 25
37 38 39 40 41 42 43 44 45 46 47 48
24 23 22 21 20 19 18 17 16 15 14 13
1 2 3 4 5 6 7 8 9 10 11 12
GND
VDD(+5V)
VDD(+5V)
GND


1 D9
2 D8
3 D7
4 D6
5 D5
7 D4
8 D3
9 D2
10 D1
11 D0
38 RPT1
39 RPT0
40 WCK
15 RCFP
14 RH
13 RV
16 RST
12 SMPL
17 RCK
21 CKX
20 CKD
23 DIO
22 ADR
24 CS
18 RFLD
O9 36
O8 35
O7 34
O6 33
O5 32
O4 30
O3 29
O2 28
O1 27
O0 26
TRS 25
VINV 42
WCF1 44
WCF0 41
WFLD 45
WV 46
WH 47
WPT1 48
WPT0 37

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	D9	25	O	TRS
2	I	D8	26	O	O0
3	I	D7	27	O	O1
4	I	D6	28	O	O2
5	I	D5	29	O	O3
6	–	GND	30	O	O4
7	I	D4	31	–	GND
8	I	D3	32	O	O5
9	I	D2	33	O	O6
10	I	D1	34	O	O7
11	I	D0	35	O	O8
12	I	SMPL	36	O	O9
13	I	RV	37	O	WPT0
14	I	RH	38	I	RPT1
15	I	RCFP	39	I	RPT0
16	I	RST.	40	I	WCK
17	I	RCK	41	O	WCF0
18	I	RFLD	42	O	VINV
19	–	VDD	43	–	VDD
20	I	CKD	44	O	WCF1
21	I	CKX	45	O	WFLD
22	I	ADR	46	O	WV
23	I/O	DIO	47	O	WH
24	I	CS	48	O	WPT1

INPUT

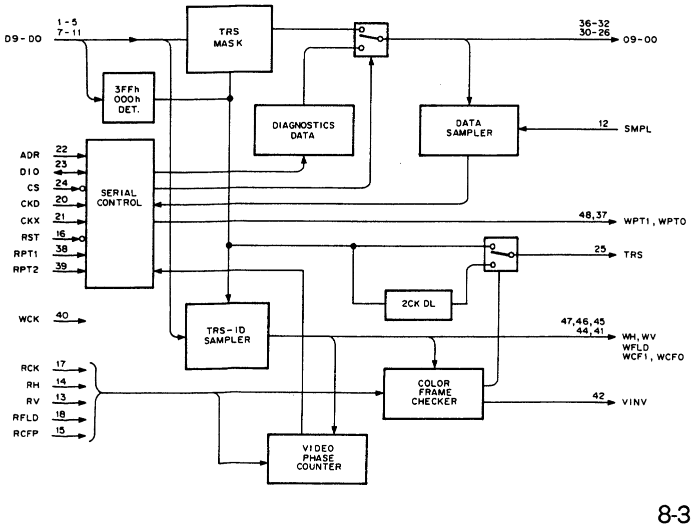
ADR	; SERIAL ADDRESS
CKD	; SERIAL INTERFACE CLOCK
CKX	; SWITCHING TIMING PULSE
CS	; CHIP SELECT
D0 – D9	; DATA IN
RCFP	; REF. COLOR FRAME PULSE
RCK	; READ CLOCK
RFLD	; REF. FIELD
RH	; REF. HD
RPT0, RPT1	; READ PORT 0, 1
RST	; RESET
RV	; REF. VD
SMPL	; SAMPLE PULSE
WCK	; WRITE CLOCK

OUTPUT

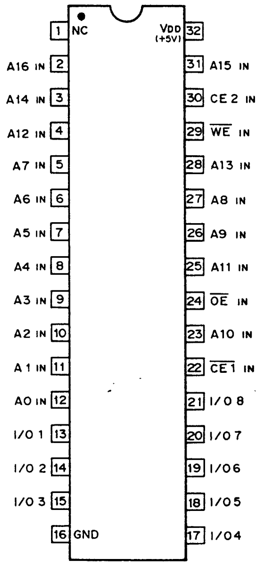
O0 – O9	; DATA OUT
TRS	; TIMING REF. SIGNAL
VINV	; V AXIS INVERT SIGNAL
WCF0, WCF1	; WRITE COLOR FRAME 0, 1
WFLD	; WRITE FIELD
WH	; WRITE HD
WPT0, WPT1	; WRITE PORT 0, 1
WV	; WRITE VD

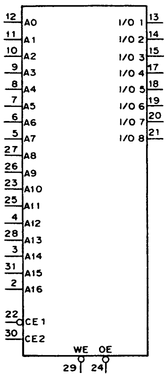
INPUT/OUTPUT

DIO	; SERIAL DATA


D9 - D0
1-5
7-11
TRS MASK
3FFh
000h
DET.
36-32
30-26
O9-O0
DIAGNOSTICS DATA
DATA SAMPLER
12 SMPL
ADR 22
DIO 23
CS 24
CKD 20
CKX 21
RST 16
RPT1 38
RPT2 39
SERIAL CONTROL
48,37 WPT1, WPT0
25 TRS
2CK DL
WCK 40
TRS-ID SAMPLER
47,46,45
44,41
WH, WV
WFLD
WCF1, WCF0
RCK 17
RH 14
RV 13
RFLD 18
RCFP 15
COLOR FRAME CHECKER
42 VINV
VIDEO PHASE COUNTER

CXK581001M-70L (SONY) FLAT PACKAGE
C-MOS 1M (131072x8)-BIT STATIC RAM
– TOP VIEW –

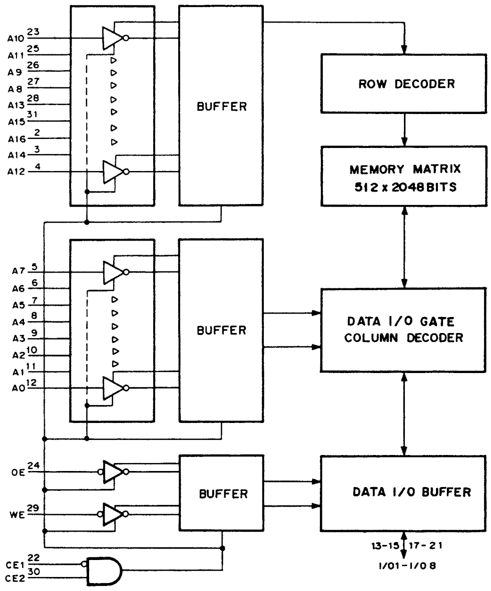

1 NC
VDD (+5V) 32
A16 IN 2
31 A15 IN
A14 IN 3
30 CE 2 IN
A12 IN 4
29 WE IN
A7 IN 5
28 A13 IN
A6 IN 6
27 A8 IN
A5 IN 7
26 A9 IN
A4 IN 8
25 A11 IN
A3 IN 9
24 OE IN
A2 IN 10
23 A10 IN
A1 IN 11
22 CE1 IN
A0 IN 12
21 I/O 8
I/O 1 13
20 I/O 7
I/O 2 14
19 I/O 6
I/O 3 15
18 I/O 5
16 GND
17 I/O 4


12 A0
11 A1
10 A2
9 A3
8 A4
7 A5
6 A6
5 A7
27 A8
26 A9
23 A10
25 A11
4 A12
28 A13
3 A14
31 A15
2 A16
22 CE1
30 CE2
I/O 1 13
I/O 2 14
I/O 3 15
I/O 4 17
I/O 5 18
I/O 6 19
I/O 7 20
I/O 8 21
WE OE
29 24

A0 – A16	; ADDRESS INPUTS
I/O1 – I/O8	; DATA INPUTS/OUTPUTS
CE1, CE2	; CHIP ENABLE INPUTS
WE	; WRITE ENABLE INPUT
OE	; OUTPUT ENABLE INPUT

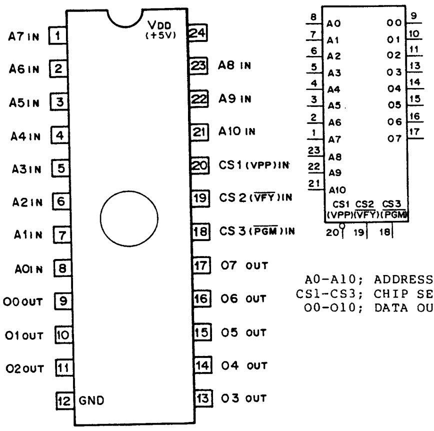
CE1	CE2	OE	WE	MODE
1	X	X	X	STANDBY
X	0	X	X	
0	1	1	1	DISABLE
0	1	0	1	READ
0	1	X	0	WRITE

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE


A10 23
A11 25
A9 26
A8 27
A13 28
A15 31
A16 2
A14 3
A12 4
BUFFER
ROW DECODER
MEMORY MATRIX
512 x 2048 BITS
A7 5
A6 6
A5 7
A4 8
A3 9
A2 10
A1 11
A0 12
BUFFER
DATA I/O GATE
COLUMN DECODER
OE 24
WE 29
BUFFER
DATA I/O BUFFER
13-15 17-21
I/O1-I/O8
CE1 22
CE2 30

CY7C291L-35PC (CYPRESS)

C-MOS 16K(2048x8)-BIT EPROM
- TOP VIEW -

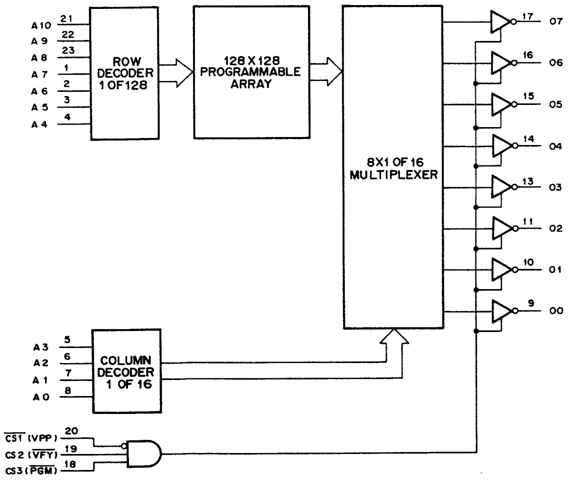

A7 IN 1
A6 IN 2
A5 IN 3
A4 IN 4
A3 IN 5
A2 IN 6
A1 IN 7
A0 IN 8
O0 OUT 9
O1 OUT 10
O2 OUT 11
12 GND
VDD (+5V) 24
23 A8 IN
22 A9 IN
21 A10 IN
20 CS1 (VPP) IN
19 CS2 (VFY) IN
18 CS3 (PGM) IN
17 O7 OUT
16 O6 OUT
15 O5 OUT
14 O4 OUT
13 O3 OUT
A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10
O0 O1 O2 O3 O4 O5 O6 O7
CS1 CS2 CS3
(VPP)(VFY)(PGM)

A0-A10; ADDRESS INPUT
CS1-CS3; CHIP SELECT
O0-O10; DATA OUTPUT

MODE SELECTION

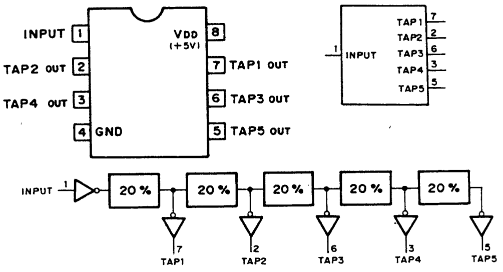
CS1	CS2	CS3	OUTPUTS	MODE
0	1	1	DATA OUT	READ
1	X	X	HI-Z	OUTPUT DISABLE
X	0	X	HI-Z	OUTPUT DISABLE
X	X	0	HI-Z	OUTPUT DISABLE
VPP	1	0	DATA IN	PROGRAM
VPP	0	1	DATA OUT	PROGRAM VERIFY
VPP	1	1	HI-Z	PROGRAM INHIBIT
VPP	1	0	DATA IN	INTELLIGENT PROGRAM
0	0	VPP	ONES	BLANK CHECK ONES
0	1	VPP	ZEROS	BLANK CHECK ZEROS

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
(NOT TO EXCEED VDD +5%)
HI-Z; HIGH IMPEDANCE
VPP; PROGRAMING VOLTAGE
(+13V to +14V)


A10 21
A9 22
A8 23
A7 1
A6 2
A5 3
A4 4
ROW DECODER 1 OF 128
128 X 128 PROGRAMMABLE ARRAY
8X1 OF 16 MULTIPLEXER
17 O7
16 O6
15 O5
14 O4
13 O3
11 O2
10 O1
9 O0
A3 5
A2 6
A1 7
A0 8
COLUMN DECODER 1 OF 16
CS1 (VPP) 20
CS2 (VFY) 19
CS3 (PGM) 18

DS1000M-50 (DALLAS SEMICONDUCTOR) (DELAY TIME = 50nS)

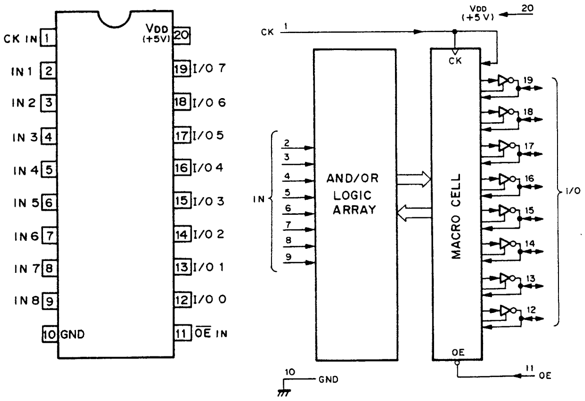
C-MOS DELAY LINE
- TOP VIEW -


INPUT 1
TAP2 OUT 2
TAP4 OUT 3
4 GND
VDD (+5V) 8
7 TAP1 OUT
6 TAP3 OUT
5 TAP5 OUT
1 INPUT
TAP1 7
TAP2 2
TAP3 6
TAP4 3
TAP5 5
INPUT 1
20 %
20 %
20 %
20 %
20 %
7 TAP1
2 TAP2
6 TAP3
3 TAP4
5 TAP5

TYPE. NO.	DELAY TIME (ns)				
	TAP1	TAP2	TAP3	TAP4	TAP5
DS1000M-50	10	20	30	40	50
DS1000M-60	12	24	36	48	60
DS1000M-75	15	30	45	60	75
DS1000M-100	20	40	60	80	100
DS1000M-125	25	50	75	100	125
DS1000M-150	30	60	90	120	150
DS1000M-175	35	70	105	140	175
DS1000M-200	40	80	120	160	200
DS1000M-250	50	100	150	200	250
DS1000M-500	100	200	300	400	500

GAL16V8A-10LP (LATTICE)

C-MOS ELECTRICALLY ERASABLE PROGRAMMABLE LOGIC DEVICE
- TOP VIEW -

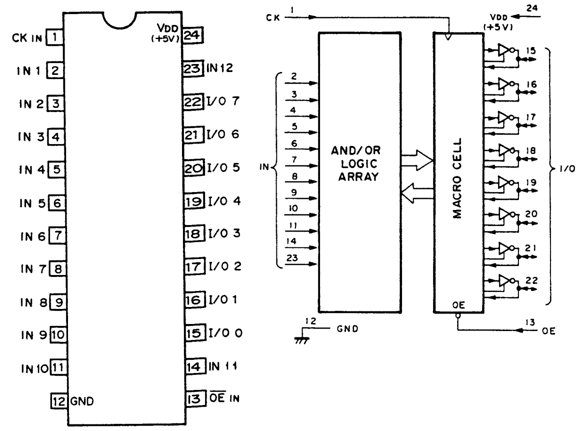

CK IN 1
IN 1 2
IN 2 3
IN 3 4
IN 4 5
IN 5 6
IN 6 7
IN 7 8
IN 8 9
10 GND
VDD (+5V) 20
19 I/O 7
18 I/O 6
17 I/O 5
16 I/O 4
15 I/O 3
14 I/O 2
13 I/O 1
12 I/O 0
11 OE IN
VDD (+5V) 20
CK 1
IN
AND/OR LOGIC ARRAY
MACRO CELL
CK
OE
I/O
10 GND
11 OE

* ABOVE DIAGRAM SHOWS CONDITIONS BEFORE PROGRAMMING.

GAL20V8A-10LP (LATTICE)

C-MOS ELECTRICALLY ERASABLE PROGRAMMABLE LOGIC DEVICE

– TOP VIEW –

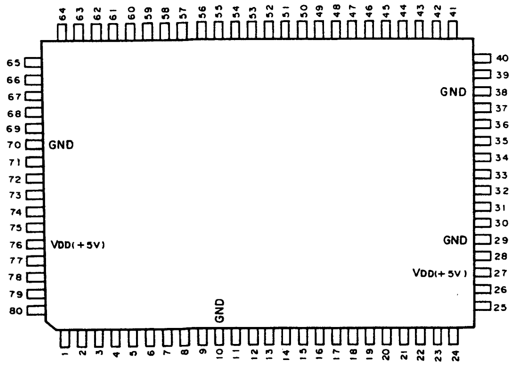


* ABOVE DIAGRAM SHOWS CONDITIONS BEFORE PROGRAMMING.

HD647180X (HITACHI) FLAT PACKAGE

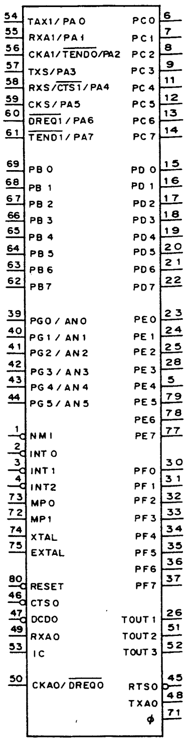
C-MOS 8-BIT MICRO PROCESSING UNIT

– TOP VIEW –

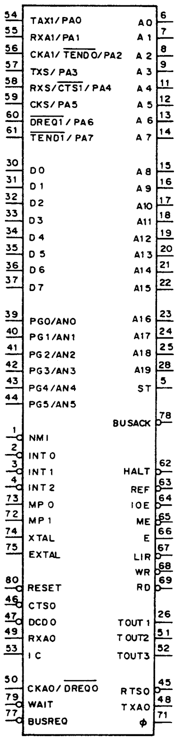


PIN No.	MODE 0		MODE 1		MODE 2		PROM MODE	
	I/O	SIGNAL	I/O	SIGNAL	I/O	SIGNAL	I/O	SIGNAL
1	I	NMI	I	NMI	I	NMI	O	A9
2	I	INT0	I	INT0	I	INT0	–	NC
3	I	INT1	I	INT1	I	INT1	–	NC
4	I	INT2	I	INT2	I	INT2	–	NC
5	I/O	PE4	O	ST	O	ST	–	NC
6	I/O	PC0	O	A0	O	A0	O	A0
7	I/O	PC1	O	A1	O	A1	O	A1
8	I/O	PC2	O	A2	O	A2	O	A2
9	I/O	PC3	O	A3	O	A3	O	A3
10	–	GND	–	GND	–	GND	–	GND
11	I/O	PC4	O	A4	O	A4	O	A4
12	I/O	PC5	O	A5	O	A5	O	A5
13	I/O	PC6	O	A6	O	A6	O	A6
14	I/O	PC7	O	A7	O	A7	O	A7
15	I/O	PD0	O	A8	I/O	A8/PD0	O	A8
16	I/O	PD1	O	A9	I/O	A9/PD1	–	NC
17	I/O	PD2	O	A10	I/O	A10/PD2	O	A10
18	I/O	PD3	O	A11	I/O	A11/PD3	O	A11
19	I/O	PD4	O	A12	I/O	A12/PD4	O	A12
20	I/O	PD5	O	A13	I/O	A13/PD5	O	A13
21	I/O	PD6	O	A14	I/O	A14/PD6	O	A14
22	I/O	PD7	O	A15	I/O	A15/PD7	I	OE
23	I/O	PE0	O	A16	I/O	A16/PE0	I	CE
24	I/O	PE1	O	A17	I/O	A17/PE1	–	NC
25	I/O	PE2	O	A18	I/O	A18/PE2	–	NC
26	O	TOUT1	O	TOUT1	O	TOUT1	–	NC
27	–	V_{DD}	–	V_{DD}	–	V_{DD}	–	V_{DD}
28	I/O	PE3	O	A19	I/O	A19/PE3	–	NC
29	–	GND	–	GND	–	GND	–	GND
30	I/O	PF0	I/O	D0	I/O	D0	O	O0
31	I/O	PF1	I/O	D1	I/O	D1	O	O1
32	I/O	PF2	I/O	D2	I/O	D2	O	O2
33	I/O	PF3	I/O	D3	I/O	D3	O	O3
34	I/O	PF4	I/O	D4	I/O	D4	O	O4
35	I/O	PF5	I/O	D5	I/O	D5	O	O5
36	I/O	PF6	I/O	D6	I/O	D6	O	O6
37	I/O	PF7	I/O	D7	I/O	D7	O	O7
38	–	GND	–	GND	–	GND	–	GND
39	I	PG0/AN0	I	PG0/AN0	I	PG0/AN0	–	NC
40	I	PG1/AN1	I	PG1/AN1	I	PG1/AN1	–	NC
41	I	PG2/AN2	I	PG2/AN2	I	PG2/AN2	–	NC
42	I	PG3/AN3	I	PG3/AN3	I	PG3/AN3	–	NC
43	I	PG4/AN4	I	PG4/AN4	I	PG4/AN4	–	NC
44	I	PG5/AN5	I	PG5/AN5	I	PG5/AN5	–	NC
45	O	RTS0	O	RTS0	O	RTS0	–	NC
46	I	CTS0	I	CTS0	I	CTS0	–	NC
47	I	DCD0	I	DCD0	I	DCD0	–	NC
48	O	TXA0	O	TXA0	O	TXA0	–	NC
49	I	RXA0	I	RXA0	I	RXA0	–	NC
50	I/O	CKA0/$\overline{\mathrm{DREQ0}}$	I/O	CKA0/$\overline{\mathrm{DREQ0}}$	I/O	CKA0/$\overline{\mathrm{DREQ0}}$	–	NC
51	O	TOUT2	O	TOUT2	O	TOUT2	–	NC
52	O	TOUT3	O	TOUT3	O	TOUT3	–	NC
53	I	IC	I	IC	I	IC	–	NC
54	I/O	TXA1/PA0	I/O	TXA1/PA0	I/O	TXA1/PA0	–	NC
55	I/O	RXA1/PA1	I/O	RXA1/PA1	I/O	RXA1/PA1	–	NC
56	I/O	CKA1/$\overline{\mathrm{TEND0}}$/PA2	I/O	CKA1/$\overline{\mathrm{TEND0}}$/PA2	I/O	CKA1/$\overline{\mathrm{TEND0}}$/PA2	–	NC
57	I/O	TXS/PA3	I/O	TXS/PA3	I/O	TXS/PA3	–	NC
58	I/O	RXS/$\overline{\mathrm{CTS1}}$/PA4	I/O	RXS/$\overline{\mathrm{CTS1}}$/PA4	I/O	RXS/$\overline{\mathrm{CTS1}}$/PA4	–	NC
59	I/O	CKS/PA5	I/O	CKS/PA5	I/O	CKS/PA5	–	NC
60	I/O	$\overline{\mathrm{DREQ1}}$/PA6	I/O	$\overline{\mathrm{DREQ1}}$/PA6	I/O	$\overline{\mathrm{DREQ1}}$/PA6	–	NC
61	I/O	$\overline{\mathrm{TEND1}}$/PA7	I/O	$\overline{\mathrm{TEND1}}$/PA7	I/O	$\overline{\mathrm{TEND1}}$/PA7	–	NC
62	I/O	PB7	O	HALT	O	HALT	–	NC
63	I/O	PB6	O	REF	O	REF	–	NC
64	I/O	PB5	O	IOE	O	IOE	–	NC
65	I/O	PB4	O	ME	O	ME	–	NC
66	I/O	PB3	O	E	O	E	–	NC
67	I/O	PB2	O	LIR	O	LIR	–	NC
68	I/O	PB1	O	WR	O	WR	–	NC
69	I/O	PB0	O	RD	O	RD	–	NC
70	–	GND	–	GND	–	GND	–	GND
71	O	φ	O	φ	O	φ	–	NC
72	I	MP1	I	MP1	I	MP1	I	MP1
73	I	MP0	I	MP0	I	MP0	I	MP0
74	I	XTAL	I	XTAL	I	XTAL	I	XTAL
75	I	EXTAL	I	EXTAL	I	EXTAL	I	EXTAL
76	–	V_{DD}	–	V_{DD}	–	V_{DD}	–	V_{DD}
77	I/O	PE7	I	WAIT	I	WAIT	–	NC
78	I/O	PE6	O	BUSACK	O	BUSACK	–	NC
79	I/O	PE5	I	BUSREQ	I	BUSREQ	–	NC
80	I	RESET	I	RESET	I	RESET	–	V_{PP}

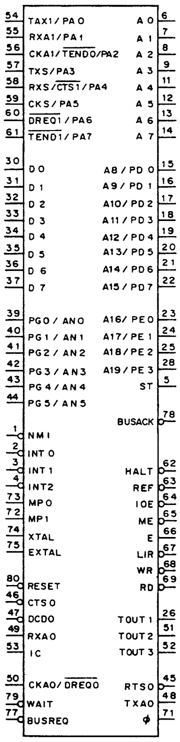
MODE 0


54 TAX1/PA0
55 RXA1/PA1
56 CKA1/TEND0/PA2
57 TXS/PA3
58 RXS/CTS1/PA4
59 CKS/PA5
60 DREQ1/PA6
61 TEND1/PA7
69 PB0
68 PB1
67 PB2
66 PB3
65 PB4
64 PB5
63 PB6
62 PB7
39 PG0/AN0
40 PG1/AN1
41 PG2/AN2
42 PG3/AN3
43 PG4/AN4
44 PG5/AN5
1 NMI
2 INT0
3 INT1
4 INT2
73 MP0
72 MP1
74 XTAL
75 EXTAL
80 RESET
46 CTS0
47 DCD0
49 RXA0
53 IC
50 CKA0/DREQ0
PC0 6
PC1 7
PC2 8
PC3 9
PC4 11
PC5 12
PC6 13
PC7 14
PD0 15
PD1 16
PD2 17
PD3 18
PD4 19
PD5 20
PD6 21
PD7 22
PE0 23
PE1 24
PE2 25
PE3 28
PE4 5
PE5 79
PE6 78
PE7 77
PF0 30
PF1 31
PF2 32
PF3 33
PF4 34
PF5 35
PF6 36
PF7 37
TOUT1 26
TOUT2 51
TOUT3 52
RTS0 45
TXA0 48
ϕ 71

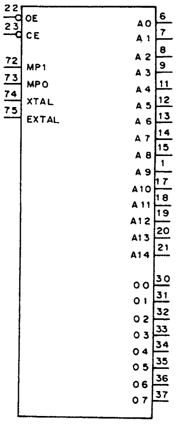
MODE 1


54 TAX1/PA0
55 RXA1/PA1
56 CKA1/TEND0/PA2
57 TXS/PA3
58 RXS/CTS1/PA4
59 CKS/PA5
60 DREQ1/PA6
61 TEND1/PA7
30 D0
31 D1
32 D2
33 D3
34 D4
35 D5
36 D6
37 D7
39 PG0/AN0
40 PG1/AN1
41 PG2/AN2
42 PG3/AN3
43 PG4/AN4
44 PG5/AN5
1 NMI
2 INT0
3 INT1
4 INT2
73 MP0
72 MP1
74 XTAL
75 EXTAL
80 RESET
46 CTS0
47 DCD0
49 RXA0
53 IC
50 CKA0/DREQ0
79 WAIT
77 BUSREQ
A0 6
A1 7
A2 8
A3 9
A4 11
A5 12
A6 13
A7 14
A8 15
A9 16
A10 17
A11 18
A12 19
A13 20
A14 21
A15 22
A16 23
A17 24
A18 25
A19 28
ST 5
BUSACK 78
HALT 62
REF 63
IOE 64
ME 65
E 66
LIR 67
WR 68
RD 69
TOUT1 26
TOUT2 51
TOUT3 52
RTS0 45
TXA0 48
ϕ 71

MODE 2


54 TAX1/PA0
55 RXA1/PA1
56 CKA1/TEND0/PA2
57 TXS/PA3
58 RXS/CTS1/PA4
59 CKS/PA5
60 DREQ1/PA6
61 TEND1/PA7
30 D0
31 D1
32 D2
33 D3
34 D4
35 D5
36 D6
37 D7
39 PG0/AN0
40 PG1/AN1
41 PG2/AN2
42 PG3/AN3
43 PG4/AN4
44 PG5/AN5
1 NMI
2 INT0
3 INT1
4 INT2
73 MP0
72 MP1
74 XTAL
75 EXTAL
80 RESET
46 CTS0
47 DCD0
49 RXA0
53 IC
50 CKA0/DREQ0
79 WAIT
77 BUSREQ
A0 6
A1 7
A2 8
A3 9
A4 11
A5 12
A6 13
A7 14
A8/PD0 15
A9/PD1 16
A10/PD2 17
A11/PD3 18
A12/PD4 19
A13/PD5 20
A14/PD6 21
A15/PD7 22
A16/PE0 23
A17/PE1 24
A18/PE2 25
A19/PE3 28
ST 5
BUSACK 78
HALT 62
REF 63
IOE 64
ME 65
E 66
LIR 67
WR 68
RD 69
TOUT1 26
TOUT2 51
TOUT3 52
RTS0 45
TXA0 48
ϕ 71

PROM MODE


22 OE
23 CE
72 MP1
73 MP0
74 XTAL
75 EXTAL
A0 6
A1 7
A2 8
A3 9
A4 11
A5 12
A6 13
A7 14
A8 15
A9 1
A10 17
A11 18
A12 19
A13 20
A14 21
O0 30
O1 31
O2 32
O3 33
O4 34
O5 35
O6 36
O7 37

INPUT

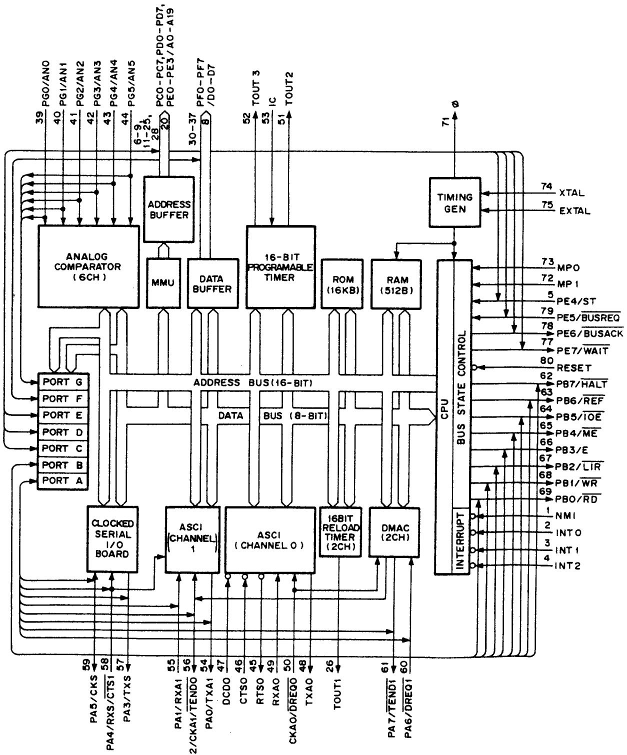
AN0 – AN5 ; ANALOG INPUT
BUSREQ ; BUS REQUEST
CTS0, 1 ; CLEAR TO SEND FOR ASYNCHRONOUS SCI CHANNEL n (n = 0 OR 1)
DCD0, 1 ; DATA CARRIER DETECT FOR ASYNCHRONOUS SCI CHANNEL n (n = 0 OR 1)
DREQ0, 1 ; DMA REQUEST FOR CHANNEL n (n = 0 OR 1)
EXTAL ; EXTERNAL CLOCK
IC ; INPUT CAPTURE
INT0 – 2 ; INTERRUPT
MP0, 1 ; MOD PROGRAM
NMI ; NON-MASKABLE INTERRUPT
PG0 – PG5 ; 6-BIT INPUT OF PORT G
RXA0, 1 ; RECEIVE DATA FOR ASYNCHRONOUS SCI CHANNEL n (n = 0 OR 1)
RXS ; RECEIVE DATA FOR SERIAL I/O PORT
XTAL ; CLOCK

OUTPUT

A0 – A19 ; ADDRESS BUS
BUSACK ; BUS ACKNOWLEDGE
E ; EANBLE
IOE ; I/O ENABLE
LIR ; LOAD INSTRUCTION REGISTER
ME ; MEMORY ENABLE
RD ; READ
REF ; REFRESH
RTS0, 1 ; REQUEST TO SEND FOR ASYNCHRONOUS SCI CHANNEL n (n = 0 OR 1)
ST ; STATUS
TEND0, 1 ; TRANSFER END FOR CHANNEL n (n = 0 OR 1)
TOUT1 – 3 ; TIMER OUT
TXA0, 1 ; TRANSFER DATA FOR ASYNCHRONOUS SCI CHANNEL n (n = 0 OR 1)
TXS ; TRANSFER DATA FOR SERIAL I/O PORT
WR ; WRITE
ϕ ; SYSTEM CLOCK

INPUT/OUTPUT

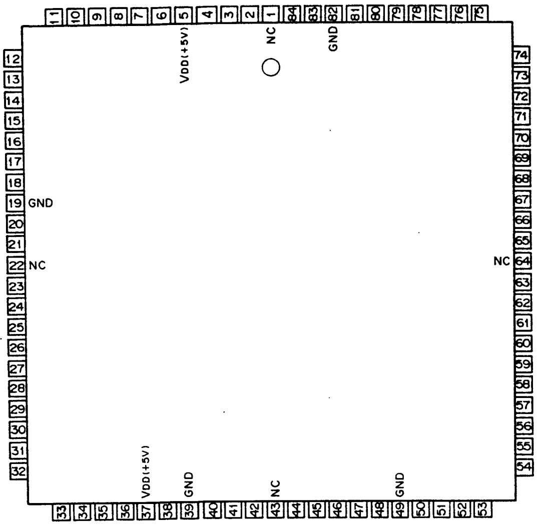
CKA0, 1 ; CLOCK FOR ASYNCHRONOUS SCI CHANNEL n (n = 0 OR 1)
CKS ; CLOCK FOR SERIAL I/O PORT
D0 – D7 ; DATA BUS
PA0 – PA7 ; 8-BIT INPUT/OUTPUT OF PORT A
PB0 – PB7 ; 8-BIT INPUT/OUTPUT OF PORT B
PC0 – PC7 ; 8-BIT INPUT/OUTPUT OF PORT C
PD0 – PD7 ; 8-BIT INPUT/OUTPUT OF PORT D
PE0 – PE7 ; 8-BIT INPUT/OUTPUT OF PORT E
PF0 – PF7 ; 8-BIT INPUT/OUTPUT OF PORT F


39 PG0/AN0
40 PG1/AN1
41 PG2/AN2
42 PG3/AN3
43 PG4/AN4
44 PG5/AN5
6-9, 11-25, 28 20 PC0-PC7, PD0-PD7, PE0-PE3/A0-A19
30-37 8 PF0-PF7 /D0-D7
52 TOUT 3
53 IC
51 TOUT2
71 ϕ
ADDRESS BUFFER
ANALOG COMPARATOR (6CH)
MMU
DATA BUFFER
16-BIT PROGRAMABLE TIMER
ROM (16KB)
RAM (512B)
TIMING GEN
74 XTAL
75 EXTAL
73 MP0
72 MP1
5 PE4/ST
79 PE5/BUSREQ
78 PE6/BUSACK
77 PE7/WAIT
80 RESET
62 PB7/HALT
63 PB6/REF
64 PB5/IOE
65 PB4/ME
66 PB3/E
67 PB2/LIR
68 PB1/WR
69 PB0/RD
1 NMI
2 INT0
3 INT1
4 INT2
CPU
BUS STATE CONTROL
INTERRUPT
PORT G
PORT F
PORT E
PORT D
PORT C
PORT B
PORT A
ADDRESS BUS(16-BIT)
DATA BUS (8-BIT)
CLOCKED SERIAL I/O BOARD
ASCI (CHANNEL 1)
ASCI (CHANNEL 0)
16BIT RELOAD TIMER (2CH)
DMAC (2CH)
59 PA5/CKS
58 PA4/RXS/CTS1
57 PA3/TXS
55 PA1/RXA1
56 PA2/CKA1/TEND0
54 PA0/TXA1
47 DCD0
46 CTS0
45 RTS0
49 RXA0
50 CKA0/DREQ0
48 TXA0
26 TOUT1
61 PA7/TEND1
60 PA6/DREQ1

HD647180X0CP6 (HITACHI)

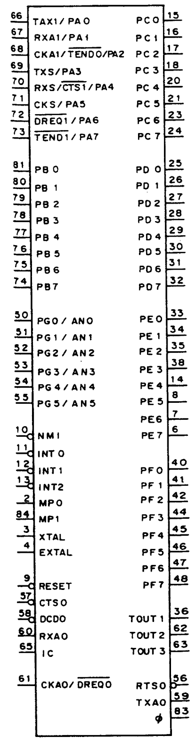
C-MOS 8-BIT MICRO PROCESSING UNIT

– TOP VIEW –

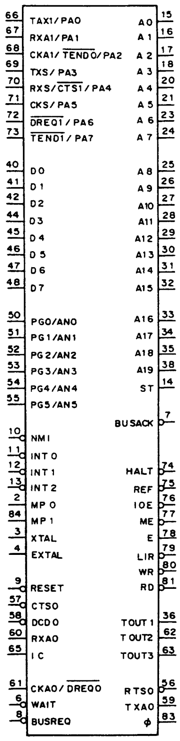


PIN No.	MODE 0		MODE 1		MODE 2		PROM MODE	
	I/O	SIGNAL	I/O	SIGNAL	I/O	SIGNAL	I/O	SIGNAL
1	–	NC	–	NC	–	NC	–	NC
2	I	MP0	I	MP0	I	MP0	I	MP0
3	I	XTAL	I	XTAL	I	XTAL	I	XTAL
4	I	EXTAL	I	EXTAL	I	EXTAL	I	EXTAL
5	–	VDD	–	VDD	–	VDD	–	VDD
6	I/O	PE7	I	WAIT	I	WAIT	–	NC
7	I/O	PE6	O	BUSACK	O	BUSACK	–	NC
8	I/O	PE5	I	BUSREQ	I	BUSREQ	–	NC
9	I	RESET	I	RESET	I	RESET	–	VPP
10	I	NMI	I	NMI	I	NMI	O	A9
11	I	INT0	I	INT0	I	INT0	–	NC
12	I	INT1	I	INT1	I	INT1	–	NC
13	I	INT2	I	INT2	I	INT2	–	NC
14	I/O	PE4	O	ST	O	ST	–	NC
15	I/O	PC0	O	A0	O	A0	O	A0
16	I/O	PC1	O	A1	O	A1	O	A1
17	I/O	PC2	O	A2	O	A2	O	A2
18	I/O	PC3	O	A3	O	A3	O	A3
19	–	GND	–	GND	–	GND	–	GND
20	I/O	PC4	O	A4	O	A4	O	A4
21	I/O	PC5	O	A5	O	A5	O	A5
22	–	NC	–	NC	–	NC	–	NC
23	I/O	PC6	O	A6	O	A6	O	A6
24	I/O	PC7	O	A7	O	A7	O	A7
25	I/O	PD0	O	A8	I/O	A8/PD0	O	A8
26	I/O	PD1	O	A9	I/O	A9/PD1	–	NC
27	I/O	PD2	O	A10	I/O	A10/PD2	O	A10
28	I/O	PD3	O	A11	I/O	A11/PD3	O	A11
29	I/O	PD4	O	A12	I/O	A12/PD4	O	A12
30	I/O	PD5	O	A13	I/O	A13/PD5	O	A13
31	I/O	PD6	O	A14	I/O	A14/PD6	O	A14
32	I/O	PD7	O	A15	I/O	A15/PD7	I	OE
33	I/O	PE0	O	A16	I/O	A16/PE0	I	CE
34	I/O	PE1	O	A17	I/O	A17/PE1	–	NC
35	I/O	PE2	O	A18	I/O	A18/PE2	–	NC
36	O	TOUT1	O	TOUT1	O	TOUT1	–	NC
37	–	VDD	–	VDD	–	VDD	–	VDD
38	I/O	PE3	O	A19	I/O	A19/PE3	–	NC
39	–	GND	–	GND	–	GND	–	GND
40	I/O	PF0	I/O	D0	I/O	D0	O	O0
41	I/O	PF1	I/O	D1	I/O	D1	O	O1
42	I/O	PF2	I/O	D2	I/O	D2	O	O2
43	–	NC	–	NC	–	NC	–	NC
44	I/O	PF3	I/O	D3	I/O	D3	O	O3
45	I/O	PF4	I/O	D4	I/O	D4	O	O4
46	I/O	PF5	I/O	D5	I/O	D5	O	O5
47	I/O	PF6	I/O	D6	I/O	D6	O	O6
48	I/O	PF7	I/O	D7	I/O	D7	O	O7
49	–	GND	–	GND	–	GND	–	GND
50	I	PG0/AN0	I	PG0/AN0	I	PG0/AN0	–	NC
51	I	PG1/AN1	I	PG1/AN1	I	PG1/AN1	–	NC
52	I	PG2/AN2	I	PG2/AN2	I	PG2/AN2	–	NC
53	I	PG3/AN3	I	PG3/AN3	I	PG3/AN3	–	NC
54	I	PG4/AN4	I	PG4/AN4	I	PG4/AN4	–	NC
55	I	PG5/AN5	I	PG5/AN5	I	PG5/AN5	–	NC
56	O	RTS0	O	RTS0	O	RTS0	–	NC
57	I	CTS0	I	CTS0	I	CTS0	–	NC
58	I	DCD0	I	DCD0	I	DCD0	–	NC
59	O	TXA0	O	TXA0	O	TXA0	–	NC
60	I	RXA0	I	RXA0	I	RXA0	–	NC
61	I/O	CKA0/$\overline{\text{DREQ0}}$	I/O	CKA0/$\overline{\text{DREQ0}}$	I/O	CKA0/$\overline{\text{DREQ0}}$	–	NC
62	O	TOUT2	O	TOUT2	O	TOUT2	–	NC
63	O	TOUT3	O	TOUT3	O	TOUT3	–	NC
64	–	NC	–	NC	–	NC	–	NC
65	I	IC	I	IC	I	IC	–	NC
66	I/O	TXA1/PA0	I/O	TXA1/PA0	I/O	TXA1/PA0	–	NC
67	I/O	RXA1/PA1	I/O	RXA1/PA1	I/O	RXA1/PA1	–	NC
68	I/O	CKA1/$\overline{\text{TEND0}}$/PA2	I/O	CKA1/$\overline{\text{TEND0}}$/PA2	I/O	CKA1/$\overline{\text{TEND0}}$/PA2	–	NC
69	I/O	TXS/PA3	I/O	TXS/PA3	I/O	TXS/PA3	–	NC
70	I/O	RXS/$\overline{\text{CTS1}}$/PA4	I/O	RXS/$\overline{\text{CTS1}}$/PA4	I/O	RXS/$\overline{\text{CTS1}}$/PA4	–	NC
71	I/O	CKS/PA5	I/O	CKS/PA5	I/O	CKS/PA5	–	NC
72	I/O	$\overline{\text{DREQ1}}$/PA6	I/O	$\overline{\text{DREQ1}}$/PA6	I/O	$\overline{\text{DREQ1}}$/PA6	–	NC
73	I/O	$\overline{\text{TEND1}}$/PA7	I/O	$\overline{\text{TEND1}}$/PA7	I/O	$\overline{\text{TEND1}}$/PA7	–	NC
74	I/O	PB7	O	HALT	O	HALT	–	NC
75	I/O	PB6	O	REF	O	REF	–	NC
76	I/O	PB5	O	IOE	O	IOE	–	NC
77	I/O	PB4	O	ME	O	ME	–	NC
78	I/O	PB3	O	E	O	E	–	NC
79	I/O	PB2	O	LIR	O	LIR	–	NC
80	I/O	PB1	O	WR	O	WR	–	NC
81	I/O	PB0	O	RD	O	RD	–	NC
82	–	GND	–	GND	–	GND	–	GND
83	O	φ	O	φ	O	φ	–	NC
84	I	MP1	I	MP1	I	MP1	I	MP1

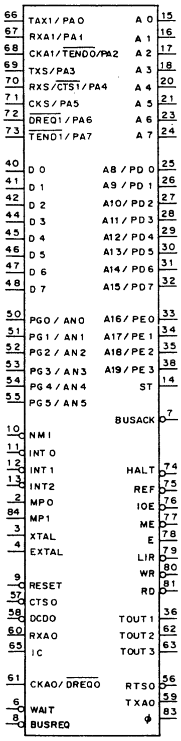
MODE 0


66 TAX1/PA0
67 RXA1/PA1
68 CKA1/TEND0/PA2
69 TXS/PA3
70 RXS/CTS1/PA4
71 CKS/PA5
72 DREQ1/PA6
73 TEND1/PA7
81 PB0
80 PB1
79 PB2
78 PB3
77 PB4
76 PB5
75 PB6
74 PB7
50 PG0/AN0
51 PG1/AN1
52 PG2/AN2
53 PG3/AN3
54 PG4/AN4
55 PG5/AN5
10 NMI
11 INT0
12 INT1
13 INT2
2 MP0
84 MP1
3 XTAL
4 EXTAL
9 RESET
57 CTS0
58 DCD0
60 RXA0
65 IC
61 CKA0/DREQ0
PC0 15
PC1 16
PC2 17
PC3 18
PC4 20
PC5 21
PC6 23
PC7 24
PD0 25
PD1 26
PD2 27
PD3 28
PD4 29
PD5 30
PD6 31
PD7 32
PE0 33
PE1 34
PE2 35
PE3 38
PE4 14
PE5 8
PE6 7
PE7 6
PF0 40
PF1 41
PF2 42
PF3 44
PF4 45
PF5 46
PF6 47
PF7 48
TOUT1 36
TOUT2 62
TOUT3 63
RTS0 56
TXA0 59
ϕ 83

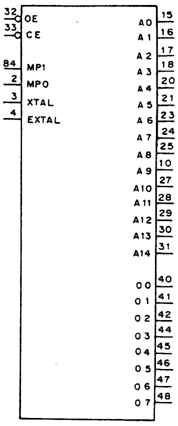
MODE 1


66 TAX1/PA0
67 RXA1/PA1
68 CKA1/TEND0/PA2
69 TXS/PA3
70 RXS/CTS1/PA4
71 CKS/PA5
72 DREQ1/PA6
73 TEND1/PA7
40 D0
41 D1
42 D2
44 D3
45 D4
46 D5
47 D6
48 D7
50 PG0/AN0
51 PG1/AN1
52 PG2/AN2
53 PG3/AN3
54 PG4/AN4
55 PG5/AN5
10 NMI
11 INT0
12 INT1
13 INT2
2 MP0
84 MP1
3 XTAL
4 EXTAL
9 RESET
57 CTS0
58 DCD0
60 RXA0
65 IC
61 CKA0/DREQ0
6 WAIT
8 BUSREQ
A0 15
A1 16
A2 17
A3 18
A4 20
A5 21
A6 23
A7 24
A8 25
A9 26
A10 27
A11 28
A12 29
A13 30
A14 31
A15 32
A16 33
A17 34
A18 35
A19 38
ST 14
BUSACK 7
HALT 74
REF 75
IOE 76
ME 77
E 78
LIR 79
WR 80
RD 81
TOUT1 36
TOUT2 62
TOUT3 63
RTS0 56
TXA0 59
ϕ 83

MODE 2


66 TAX1/PA0
67 RXA1/PA1
68 CKA1/TEND0/PA2
69 TXS/PA3
70 RXS/CTS1/PA4
71 CKS/PA5
72 DREQ1/PA6
73 TEND1/PA7
40 D0
41 D1
42 D2
44 D3
45 D4
46 D5
47 D6
48 D7
50 PG0/AN0
51 PG1/AN1
52 PG2/AN2
53 PG3/AN3
54 PG4/AN4
55 PG5/AN5
10 NMI
11 INT0
12 INT1
13 INT2
2 MP0
84 MP1
3 XTAL
4 EXTAL
9 RESET
57 CTS0
58 DCD0
60 RXA0
65 IC
61 CKA0/DREQ0
6 WAIT
8 BUSREQ
A0 15
A1 16
A2 17
A3 18
A4 20
A5 21
A6 23
A7 24
A8/PD0 25
A9/PD1 26
A10/PD2 27
A11/PD3 28
A12/PD4 29
A13/PD5 30
A14/PD6 31
A15/PD7 32
A16/PE0 33
A17/PE1 34
A18/PE2 35
A19/PE3 38
ST 14
BUSACK 7
HALT 74
REF 75
IOE 76
ME 77
E 78
LIR 79
WR 80
RD 81
TOUT1 36
TOUT2 62
TOUT3 63
RTS0 56
TXA0 59
ϕ 83

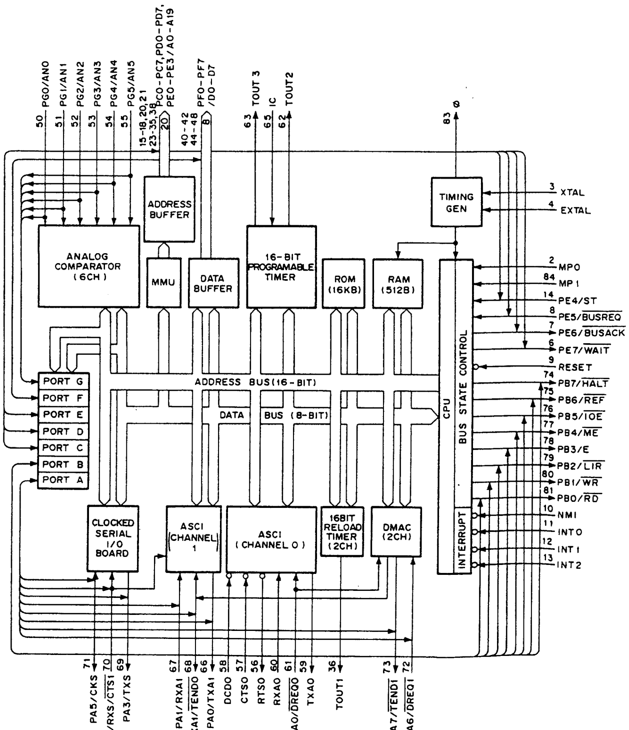
PROM MODE


32 OE
33 CE
84 MP1
2 MP0
3 XTAL
4 EXTAL
A0 15
A1 16
A2 17
A3 18
A4 20
A5 21
A6 23
A7 24
A8 25
A9 10
A10 27
A11 28
A12 29
A13 30
A14 31
O0 40
O1 41
O2 42
O3 44
O4 45
O5 46
O6 47
O7 48

INPUT
AN0 – AN5 ; ANALOG INPUT
BUSREQ ; BUS REQUEST
CTS0, 1 ; CLEAR TO SEND FOR ASYNCHRONOUS SCI CHANNEL n (n = 0 OR 1)
DCD0, 1 ; DATA CARRIER DETECT FOR ASYNCHRONOUS SCI CHANNEL n (n = 0 OR 1)
DREQ0, 1 ; DMA REQUEST FOR CHANNEL n (n = 0 OR 1)
EXTAL ; EXTERNAL CLOCK
IC ; INPUT CAPTURE
INT0 – 2 ; INTERRUPT
MP0, 1 ; MOD PROGRAM
NMI ; NON-MASKABLE INTERRUPT
PG0 – PG5 ; 6-BIT INPUT OF PORT G
RXA0, 1 ; RECEIVE DATA FOR ASYNCHRONOUS SCI CHANNEL n (n = 0 OR 1)
RXS ; RECEIVE DATA FOR SERIAL I/O PORT
XTAL ; CLOCK

OUTPUT
A0 – A19 ; ADDRESS BUS
BUSACK ; BUS ACKNOWLEDGE
E ; EANBLE
IOE ; I/O ENABLE
LIR ; LOAD INSTRUCTION REGISTER
ME ; MEMORY ENABLE
RD ; READ
REF ; REFRESH
RTS0, 1 ; REQUEST TO SEND FOR ASYNCHRONOUS SCI CHANNEL n (n = 0 OR 1)
ST ; STATUS
TEND0, 1 ; TRANSFER END FOR CHANNEL n (n = 0 OR 1)
TOUT1 – 3 ; TIMER OUT
TXA0, 1 ; TRANSFER DATA FOR ASYNCHRONOUS SCI CHANNEL n (n = 0 OR 1)
TXS ; TRANSFER DATA FOR SERIAL I/O PORT
WR ; WRITE
ϕ ; SYSTEM CLOCK

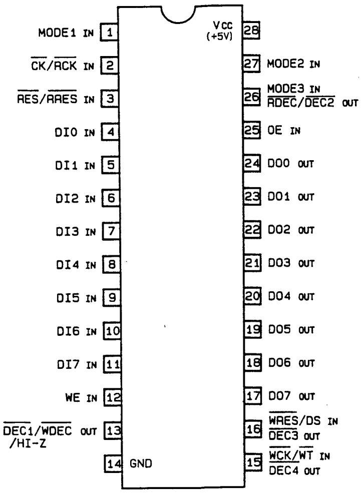
INPUT/OUTPUT
CKA0, 1 ; CLOCK FOR ASYNCHRONOUS SCI CHANNEL n (n = 0 OR 1)
CKS ; CLOCK FOR SERIAL I/O PORT
D0 – D7 ; DATA BUS
PA0 – PA7 ; 8-BIT INPUT/OUTPUT OF PORT A
PB0 – PB7 ; 8-BIT INPUT/OUTPUT OF PORT B
PC0 – PC7 ; 8-BIT INPUT/OUTPUT OF PORT C
PD0 – PD7 ; 8-BIT INPUT/OUTPUT OF PORT D
PE0 – PE7 ; 8-BIT INPUT/OUTPUT OF PORT E
PF0 – PF7 ; 8-BIT INPUT/OUTPUT OF PORT F

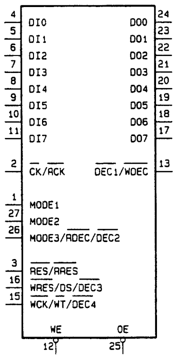

50 PG0/AN0
51 PG1/AN1
52 PG2/AN2
53 PG3/AN3
54 PG4/AN4
55 PG5/AN5
15-18, 20, 21, 23-35, 38 PC0-PC7, PD0-PD7, PE0-PE3/A0-A19
20
40-42, 44-48 PF0-PF7/D0-D7
8
63 TOUT3
65 IC
62 TOUT2
83 ϕ
ADDRESS BUFFER
ANALOG COMPARATOR (6CH)
MMU
DATA BUFFER
16-BIT PROGRAMABLE TIMER
ROM (16KB)
RAM (512B)
TIMING GEN
3 XTAL
4 EXTAL
2 MP0
84 MP1
14 PE4/ST
8 PE5/BUSREQ
7 PE6/BUSACK
6 PE7/WAIT
9 RESET
74 PB7/HALT
75 PB6/REF
76 PB5/IOE
77 PB4/ME
78 PB3/E
79 PB2/LIR
80 PB1/WR
81 PB0/RD
10 NMI
11 INT0
12 INT1
13 INT2
CPU
BUS STATE CONTROL
INTERRUPT
PORT G
PORT F
PORT E
PORT D
PORT C
PORT B
PORT A
ADDRESS BUS (16-BIT)
DATA BUS (8-BIT)
CLOCKED SERIAL I/O BOARD
ASCI CHANNEL 1
ASCI (CHANNEL 0)
16BIT RELOAD TIMER (2CH)
DMAC (2CH)
71 PA5/CKS
70 PA4/RXS/CTS1
69 PA3/TXS
67 PA1/RXA1
68 PA2/CKA1/TEND0
66 PA0/TXA1
58 DCD0
57 CTS0
56 RTS0
60 RXA0
61 CKA0/DREQ0
59 TXA0
36 TOUT1
73 PA7/TEND1
72 PA6/DREQ1

HM63021FP-28 (HITACHI) FLAT PACKAGE

2048 WORDx8-BIT LINE MEMORY

– TOP VIEW –


MODE1 IN 1
$\overline{CK}$/$\overline{RCK}$ IN 2
$\overline{RES}$/$\overline{RRES}$ IN 3
DI0 IN 4
DI1 IN 5
DI2 IN 6
DI3 IN 7
DI4 IN 8
DI5 IN 9
DI6 IN 10
DI7 IN 11
WE IN 12
$\overline{DEC1}$/$\overline{WDEC}$ OUT 13
/HI-Z
14 GND
Vcc (+5V) 28
27 MODE2 IN
26 MODE3 IN $\overline{RDEC}$/$\overline{DEC2}$ OUT
25 OE IN
24 DO0 OUT
23 DO1 OUT
22 DO2 OUT
21 DO3 OUT
20 DO4 OUT
19 DO5 OUT
18 DO6 OUT
17 DO7 OUT
16 $\overline{WRES}$/DS IN $\overline{DEC3}$ OUT
15 $\overline{WCK}$/$\overline{WT}$ IN $\overline{DEC4}$ OUT

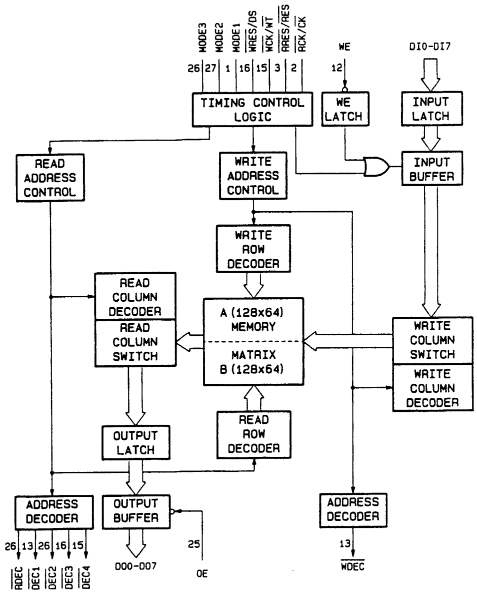

4 DI0
5 DI1
6 DI2
7 DI3
8 DI4
9 DI5
10 DI6
11 DI7
DO0 24
DO1 23
DO2 22
DO3 21
DO4 20
DO5 19
DO6 18
DO7 17
2 $\overline{CK}$/$\overline{RCK}$
$\overline{DEC1}$/$\overline{WDEC}$ 13
1 MODE1
27 MODE2
26 MODE3/$\overline{RDEC}$/$\overline{DEC2}$
3 $\overline{RES}$/$\overline{RRES}$
16 $\overline{WRES}$/DS/$\overline{DEC3}$
15 $\overline{WCK}$/$\overline{WT}$/$\overline{DEC4}$
WE 12
OE 25

MODE1, 2, 3: MODE SELECT INPUTS
$\overline{RCK}$: READ CLOCK INPUT
$\overline{WCK}$: WRITE CLOCK INPUT
$\overline{CK}$: CLOCK INPUT
$\overline{RRES}$: READ RESET INPUT
$\overline{RES}$: RESET INPUT
DI0–DI7: DATA INPUTS
WE: WRITE ENABLE INPUT
HI-Z: HIGH IMPEDANCE
WT: WRITE TIMING INPUT
DEC1, 2, 3, 4: DECODE PULSE OUTPUTS
WDEC: WRITE DECODE PULSE OUTPUT
RDEC: READ DECODE PULSE OUTPUT
DS: DELAY SELECT INPUT
DO0–DO7: DATA OUTPUTS
OE: OUTPUT ENABLE INPUT

MODE1	MODE2	MODE3	MODE
1	1	1	TIME BASE COMPRESSING /EXPANDING
1	1	0	DOUBLE SPEED EXCHANGE
1	0	*	TBC
0	1	*	1H/2H DELAY
0	0	*	DELAY LINE

0: LOW LEVEL
1: HIGH LEVEL
*: DEC OUTPUT SIGNAL

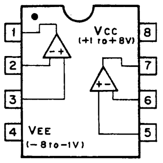
PIN NO.	MODE				
	TIME BASE COMPRESSING /EXPANDING	DOUBLE SPEED EXCHANGE	TBC	1H/2H DELAY	DELAY LINE
1	MODE1				
2	$\overline{RCK}$			$\overline{CK}$	
3	$\overline{RRES}$			$\overline{RES}$	
4–11	DI0–DI7				
12	$\overline{WE}$				
13	HI-Z		$\overline{WDEC}$	$\overline{DEC1}$	
15	$\overline{WCK}$			$\overline{WT}$	$\overline{DEC4}$
16	$\overline{WRES}$			DS	$\overline{DEC3}$
17–24	DO0–DO7				
25	$\overline{OE}$				
26	MODE3		$\overline{RDEC}$	$\overline{DEC2}$	
27	MODE2				


MODE3
MODE2
MODE1
$\overline{WRES}$/DS
$\overline{WCK}$/$\overline{WT}$
$\overline{RRES}$/$\overline{RES}$
$\overline{RCK}$/$\overline{CK}$
26 27 1 16 15 3 2
WE
12
DI0–DI7
TIMING CONTROL LOGIC
WE LATCH
INPUT LATCH
READ ADDRESS CONTROL
WRITE ADDRESS CONTROL
INPUT BUFFER
WRITE ROW DECODER
READ COLUMN DECODER
READ COLUMN SWITCH
A (128x64) MEMORY
MATRIX B (128x64)
WRITE COLUMN SWITCH
WRITE COLUMN DECODER
READ ROW DECODER
OUTPUT LATCH
ADDRESS DECODER
OUTPUT BUFFER
ADDRESS DECODER
26 13 26 16 15
$\overline{RDEC}$ $\overline{DEC1}$ $\overline{DEC2}$ $\overline{DEC3}$ $\overline{DEC4}$
DO0–DO7
25
OE
13
$\overline{WDEC}$

ICL7621BCSA (MAXIM) FLAT PACKAGE

C-MOS DUAL OPERATIONAL AMPLIFIER

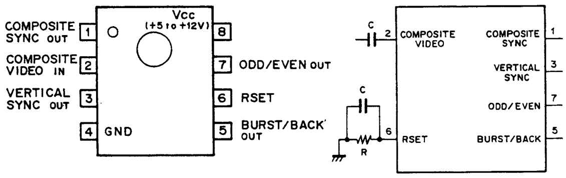
– TOP VIEW –

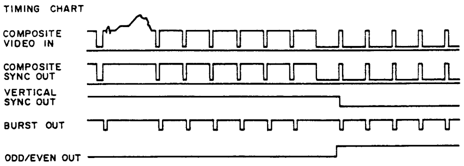

1
2
3
4
Vcc (+1 to +8V) 8
7
6
5
VEE (–8 to –1V)

LM1881M (NS) FLAT PACKAGE

VIDEO SYNC SEPARATOR

– TOP VIEW –


COMPOSITE SYNC OUT 1
COMPOSITE VIDEO IN 2
VERTICAL SYNC OUT 3
4 GND
Vcc (+5 to +12V) 8
7 ODD/EVEN OUT
6 RSET
5 BURST/BACK OUT
C
2
COMPOSITE VIDEO
COMPOSITE SYNC 1
VERTICAL SYNC 3
ODD/EVEN 7
C
6
R
RSET
BURST/BACK 5

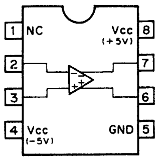


LM360M (NS) FLAT PACKAGE

HIGH SPEED VOLTAGE COMPARATOR

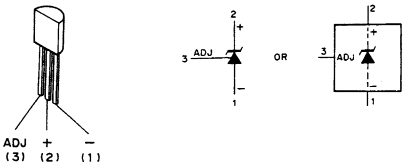
(TTL OUTPUT)

– TOP VIEW –

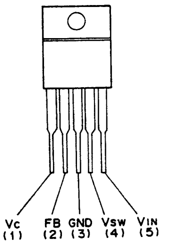

1 NC
2
3
4 Vcc (–5V)
Vcc (+5V) 8
7
6
GND 5

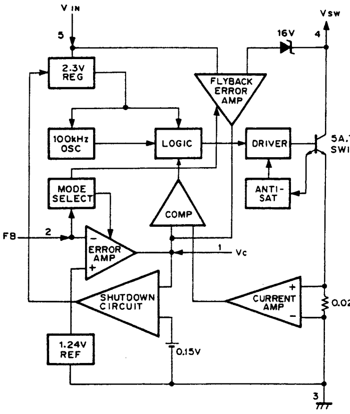
LT1009CZ (LINEAR TECHNOLOGY)

VOLTAGE REFERENCE


ADJ + –
(3) (2) (1)
2
3 ADJ
1
OR
2
3 ADJ
1

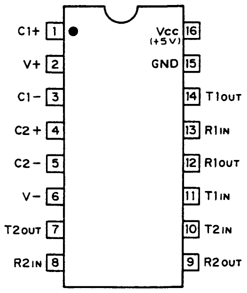
LT1171CT (LINEAR TECHNOLOGY)
SWITCHING REGULATORS (100kHz)
- SIDE VIEW -

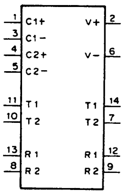

Vc (1)
FB (2)
GND (3)
Vsw (4)
VIN (5)


V IN
5
Vsw
4
16V
2.3V REG
FLYBACK ERROR AMP
100kHz OSC
LOGIC
DRIVER
5A,75V SWITCH
MODE SELECT
COMP
ANTI-SAT
FB
2
ERROR AMP
1
Vc
SHUTDOWN CIRCUIT
CURRENT AMP
0.02Ω
1.24V REF
0.15V
3

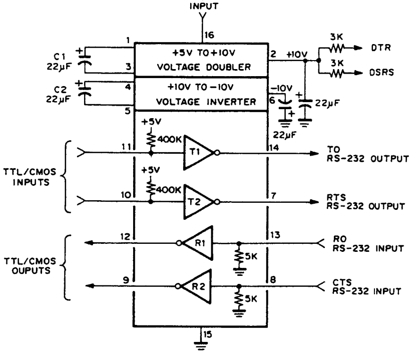
FB ; FEEDBACK
GND ; GROUND
Vc ; CONTROL VOLTAGE IN
Vsw ; SWITCH OUT
VIN ; POWER VOLTAGE IN

MAX232CPE (MAXIM)
RS-232 TRANSMITTER/RECEIVER
- TOP VIEW -

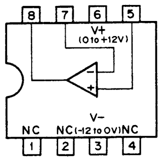

C1+ 1
V+ 2
C1- 3
C2+ 4
C2- 5
V- 6
T2OUT 7
R2IN 8
16 Vcc (+5V)
15 GND
14 T1OUT
13 R1IN
12 R1OUT
11 T1IN
10 T2IN
9 R2OUT


1 C1+
3 C1-
4 C2+
5 C2-
11 T1
10 T2
13 R1
8 R2
V+ 2
V- 6
T1 14
T2 7
R1 12
R2 9

R 1,2; RECEIVER 1,2
T 1,2; TRANSMITTER 1,2

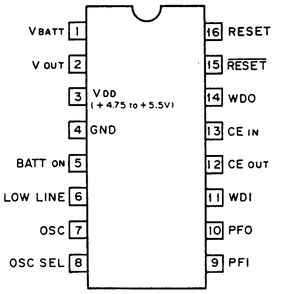

+5V INPUT
16
1
C1 22μF
3
C2 22μF
4
5
+5V TO +10V VOLTAGE DOUBLER
+10V TO -10V VOLTAGE INVERTER
2
+10V
3K
DTR
3K
DSRS
-10V
6
22μF
22μF
+5V
400K
11
T1
14
TO RS-232 OUTPUT
TTL/CMOS INPUTS
+5V
400K
10
T2
7
RTS RS-232 OUTPUT
12
R1
13
5K
RO RS-232 INPUT
TTL/CMOS OUPUTS
9
R2
8
5K
CTS RS-232 INPUT
15

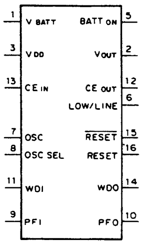
MAX452CSA (MAXIM) FLAT PACKAGE
C-MOS 50MHz VIDEO AMPLIFIER
- TOP VIEW -


8
7
6
5
V+ (0 to +12V)
V-
NC
NC (-12 to 0V)
NC
1
2
3
4

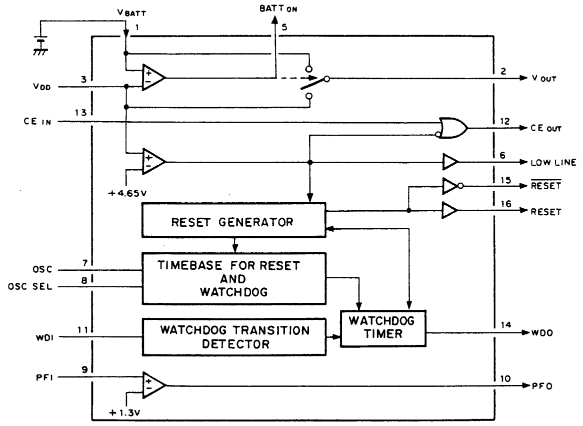
(V+)-(V-)≦12V

MAX691CPE (MAXIM)
C-MOS MICROPROCESSOR SUPERVISORY CIRCUITS
- TOP VIEW -

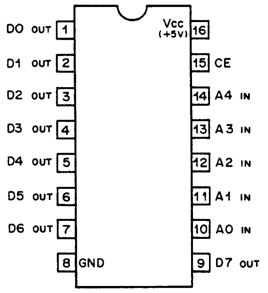

VBATT 1
V OUT 2
3 VDD (+4.75 to +5.5V)
4 GND
BATT ON 5
LOW LINE 6
OSC 7
OSC SEL 8
16 RESET
15 RESET
14 WDO
13 CE IN
12 CE OUT
11 WDI
10 PFO
9 PFI

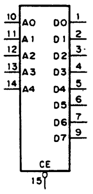

1 V BATT
3 VDD
13 CE IN
7 OSC
8 OSC SEL
11 WDI
9 PFI
BATT ON 5
VOUT 2
CE OUT 12
LOW/LINE 6
RESET 15
RESET 16
WDO 14
PFO 10

CE ; CHIP ENABLE
PFI, PFO ; POWER FAIL INPUT/OUTPUT
WDI, WDO ; WATCHDOG INPUT/OUTPUT


VBATT
1
BATT ON
5
VDD
3
2
V OUT
CE IN
13
12
CE OUT
6
LOW LINE
+4.65V
15
RESET
16
RESET
RESET GENERATOR
OSC
7
OSC SEL
8
TIMEBASE FOR RESET AND WATCHDOG
WDI
11
WATCHDOG TRANSITION DETECTOR
WATCHDOG TIMER
14
WDO
PFI
9
+1.3V
10
PFO

MB7112L (FUJITSU) (ACCESS TIME = 50nS)
256-BIT (32x8) PROM WITH 3-STATE OUTPUT
- TOP VIEW -

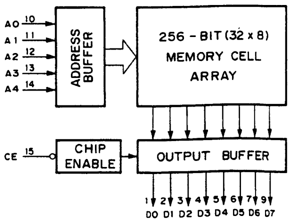

D0 OUT 1
D1 OUT 2
D2 OUT 3
D3 OUT 4
D4 OUT 5
D5 OUT 6
D6 OUT 7
8 GND
16 Vcc (+5V)
15 CE
14 A4 IN
13 A3 IN
12 A2 IN
11 A1 IN
10 A0 IN
9 D7 OUT


10 A0
11 A1
12 A2
13 A3
14 A4
D0 1
D1 2
D2 3
D3 4
D4 5
D5 6
D6 7
D7 9
CE
15

CE	OUTPUT
0	ENABLE
1	HI - Z

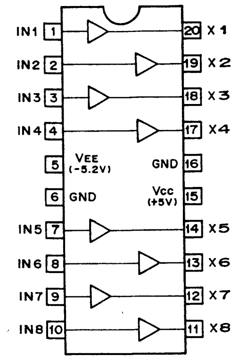
0; LOW LEVEL
1; HIGH LEVEL
HI-Z; HIGH IMPEDANCE

A0 - A4; ADDRESS INPUTS
D0 - D7; DATA OUTPUTS
CE ; CHIP ENABLE INPUT


A0 10
A1 11
A2 12
A3 13
A4 14
ADDRESS BUFFER
256 - BIT (32 x 8) MEMORY CELL ARRAY
CE 15
CHIP ENABLE
OUTPUT BUFFER
1 2 3 4 5 6 7 9
D0 D1 D2 D3 D4 D5 D6 D7

MB766P (FUJITSU)

OCTAL ECL TO TTL LEVEL TRANSLATOR
– TOP VIEW –


IN1 1
IN2 2
IN3 3
IN4 4
5 VEE (-5.2V)
6 GND
IN5 7
IN6 8
IN7 9
IN8 10
20 X1
19 X2
18 X3
17 X4
16 GND
15 Vcc (+5V)
14 X5
13 X6
12 X7
11 X8

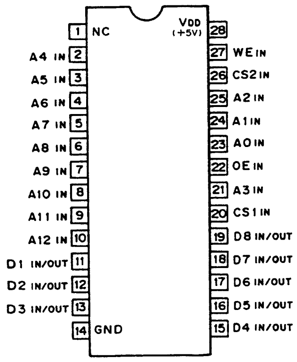
INPUT	OUTPUT
IN(ECL)	X(TTL)
1	1
0	0

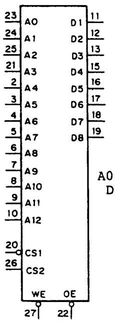
0; LOW LEVEL
1; HIGH LEVEL

IN1-IN8; ECL LEVEL INPUT
X1-X8; TTL LEVEL OUTPUT

MB81C78A-35P (FUJITSU)

C-MOS 64K (8192x8)-BIT STATIC RAM
– TOP VIEW –

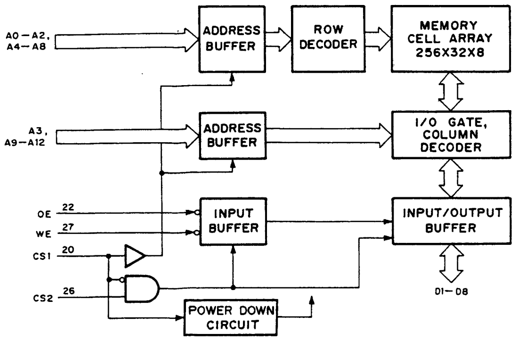

1 NC
A4 IN 2
A5 IN 3
A6 IN 4
A7 IN 5
A8 IN 6
A9 IN 7
A10 IN 8
A11 IN 9
A12 IN 10
D1 IN/OUT 11
D2 IN/OUT 12
D3 IN/OUT 13
14 GND
VDD (+5V) 28
27 WE IN
26 CS2 IN
25 A2 IN
24 A1 IN
23 A0 IN
22 OE IN
21 A3 IN
20 CS1 IN
19 D8 IN/OUT
18 D7 IN/OUT
17 D6 IN/OUT
16 D5 IN/OUT
15 D4 IN/OUT


23 A0
24 A1
25 A2
21 A3
2 A4
3 A5
4 A6
5 A7
6 A8
7 A9
8 A10
9 A11
10 A12
20 CS1
26 CS2
D1 11
D2 12
D3 13
D4 15
D5 16
D6 17
D7 18
D8 19
WE 27
OE 22

A0-A12 ; ADDRESS INPUTS
D1-D8 ; DATA INPUTS/OUTPUTS
CS1 ; CHIP SELECT INPUT 1
CS2 ; CHIP SELECT INPUT 2
OE ; OUTPUT ENABLE INPUT
WE ; WRITE ENABLE INPUT

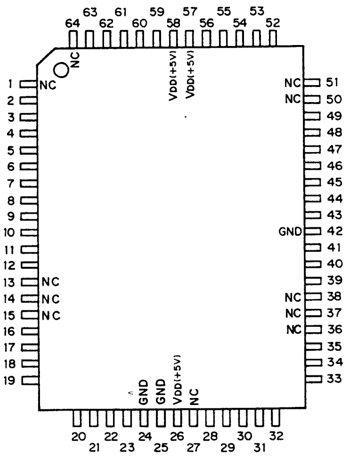
WE	CS1	CS2	OE	D1-D8	FUNCTIION
X	1	X	X	HI-Z	STAND BY
X	0	0	X	HI-Z	NO SELECTION
1	0	1	1	HI-Z	OUTPUT DISABLE
1	0	1	0	D OUT	READ
0	0	1	X	D IN	WRITE

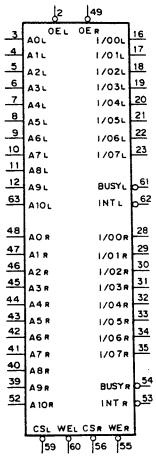
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE


A0–A2, A4–A8
ADDRESS BUFFER
ROW DECODER
MEMORY CELL ARRAY 256X32X8
A3, A9–A12
ADDRESS BUFFER
I/O GATE, COLUMN DECODER
OE 22
WE 27
CS1 20
CS2 26
INPUT BUFFER
INPUT/OUTPUT BUFFER
POWER DOWN CIRCUIT
D1–D8

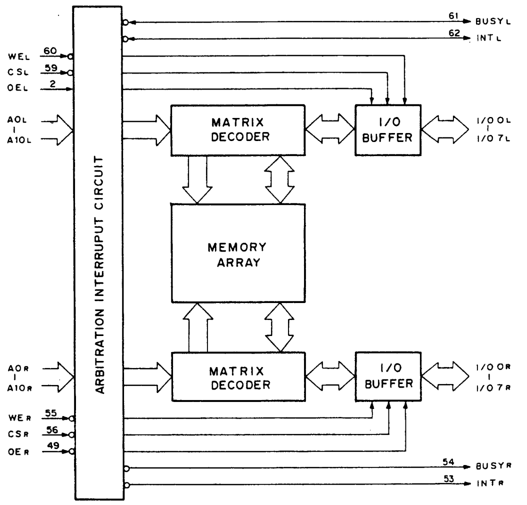
MB8421-90LPFQ (FUJITSU) (ACCESS TIME = 90nS) FLAT PACKAGE

C-MOS 16384 (2Kx8) BIT DUAL PORT STATIC RAM
– TOP VIEW –


63 61 59 57 55 53
64 62 60 58 56 54 52
NC
VDD(+5V)
VDD(+5V)
1 NC
2
3
4
5
6
7
8
9
10
11
12
13 NC
14 NC
15 NC
16
17
18
19
NC 51
NC 50
49
48
47
46
45
44
43
GND 42
41
40
39
NC 38
NC 37
NC 36
35
34
33
GND
GND
VDD(+5V)
NC
20 22 24 26 28 30 32
21 23 25 27 29 31


2 OEL
49 OER
3 A0L
4 A1L
5 A2L
6 A3L
7 A4L
8 A5L
9 A6L
10 A7L
11 A8L
12 A9L
63 A10L
48 A0R
47 A1R
46 A2R
45 A3R
44 A4R
43 A5R
42 A6R
41 A7R
40 A8R
39 A9R
52 A10R
I/O0L 16
I/O1L 17
I/O2L 18
I/O3L 19
I/O4L 20
I/O5L 21
I/O6L 22
I/O7L 23
BUSYL 61
INTL 62
I/O0R 28
I/O1R 29
I/O2R 30
I/O3R 31
I/O4R 32
I/O5R 33
I/O6R 34
I/O7R 35
BUSYR 54
INTR 53
CSL 59
WEL 60
CSR 56
WER 55

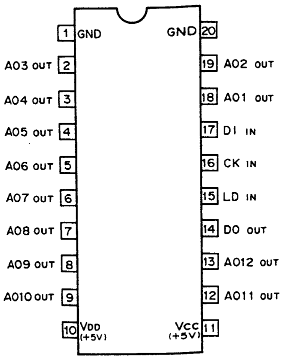
A0L – A10L, A0R – A10R ; ADDRESS INPUTS
I/O0L – I/O7L, I/O0R – I/O7R ; DATA INPUTS/OUTPUTS
CSL, CSR ; CHIP SELECT INPUT
WEL, WER ; WRITE ENABLE INPUT
OEL, OER ; OUTPUT ENABLE INPUT
BUSYL, BUSYR ; BUSY OUTPUT
INTL, INTR ; INTERRUPT OUTPUT

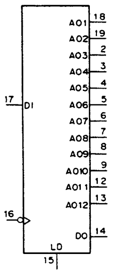

ARBITRATION INTERRUPT CIRCUIT
61 BUSYL
62 INTL
WEL 60
CSL 59
OEL 2
A0L
A10L
MATRIX DECODER
I/O BUFFER
I/O0L
I/O7L
MEMORY ARRAY
A0R
A10R
MATRIX DECODER
I/O BUFFER
I/O0R
I/O7R
WER 55
CSR 56
OER 49
54 BUSYR
53 INTR

MB88341PF (FUJITSU) FLAT PACKAGE

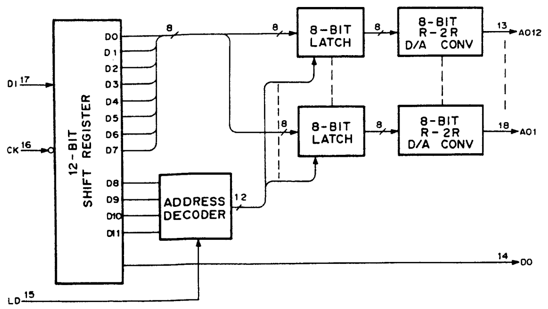
C-MOS 8-BIT D/A CONVERTER

- TOP VIEW -


1 GND
A03 OUT 2
A04 OUT 3
A05 OUT 4
A06 OUT 5
A07 OUT 6
A08 OUT 7
A09 OUT 8
A010 OUT 9
10 VDD (+5V)
GND 20
19 A02 OUT
18 A01 OUT
17 DI IN
16 CK IN
15 LD IN
14 DO OUT
13 A012 OUT
12 A011 OUT
VCC (+5V) 11


17 DI
16
A01 18
A02 19
A03 2
A04 3
A05 4
A06 5
A07 6
A08 7
A09 8
A010 9
A011 12
A012 13
DO 14
LD 15

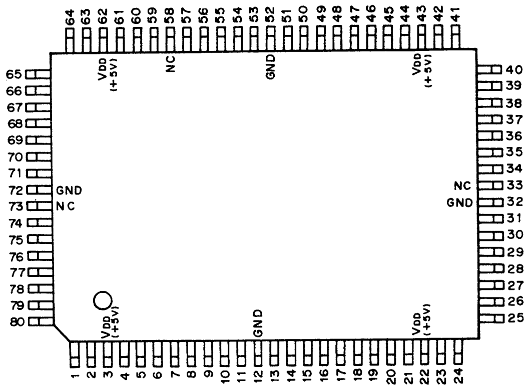
A01 – A012 : 8-BIT D/A OUTPUTS
CK : CLOCK INPUT
DI : SERIAL DATA INPUT
DO : DATA OUTPUT
LD : DATA LOAD CONTROL INPUT (H : LOAD)


DI 17
CK 16
LD 15
12-BIT SHIFT REGISTER
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
8
8-BIT LATCH
8-BIT R-2R D/A CONV
13 A012
18 A01
ADDRESS DECODER
12
14 DO

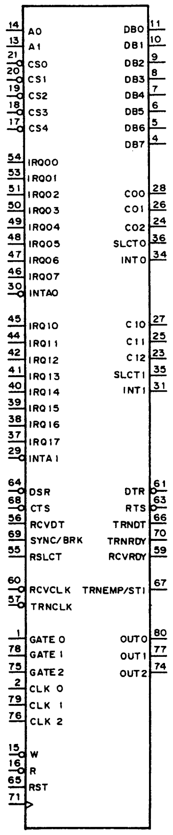
MB89394-PF (FUJITSU) FLAT PACKAGE

C-MOS ENCAPSULATED PERIPHERAL PROCESSOR

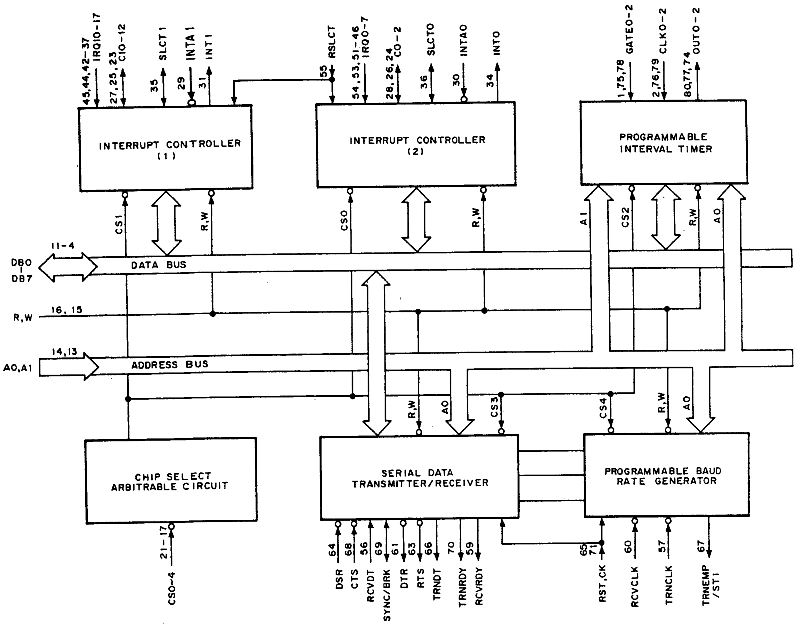
- TOP VIEW -


VDD (+5V)
NC
GND
VDD (+5V)
GND
NC
NC
GND
VDD (+5V)
GND
VDD (+5V)

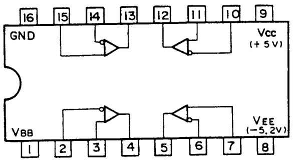
PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	GATE0	21	I	CS0	41	I	IRQ13	61	O	DTR
2	I	CLK0	22	–	VDD	42	I	IRQ12	62	–	VDD
3	–	VDD	23	I/O	C12	43	–	VDD	63	O	RTS
4	I/O	DB7	24	I/O	C02	44	I	IRQ11	64	I	DSR
5	I/O	DB6	25	I/O	C11	45	I	IRQ10	65	I	RST
6	I/O	DB5	26	I/O	C01	46	I	IRQ07	66	O	TRNDT
7	I/O	DB4	27	I/O	C10	47	I	IRQ06	67	O	TRNEMP/STI
8	I/O	DB3	28	I/O	C00	48	I	IRQ05	68	I	CTS
9	I/O	DB2	29	I	INTA1	49	I	IRQ04	69	I/O	SYNC/BRK
10	I/O	DB1	30	I	INTA0	50	I	IRQ03	70	O	TRNRDY
11	I/O	DB0	31	O	INT1	51	I	IRQ02	71	I	CK
12	–	GND	32	–	GND	52	–	GND	72	–	GND
13	I	A1	33	–	NC	53	I	IRQ01	73	–	NC
14	I	A0	34	O	INT0	54	I	IRQ00	74	O	OUT2
15	I	W	35	I/O	SLCT1	55	I	RSLCT	75	I	GATE2
16	I	R	36	I/O	SLCT0	56	I	RCVDT	76	I	CLK2
17	I	CS4	37	I	IRQ17	57	I	TRNCLK	77	O	OUT1
18	I	CS3	38	I	IRQ16	58	–	NC	78	I	GATE1
19	I	CS2	39	I	IRQ15	59	O	RCVRDY	79	I	CLK1
20	I	CS1	40	I	IRQ14	60	I	RCVCLK	80	O	OUT0


14 A0
13 A1
21 CS0
20 CS1
19 CS2
18 CS3
17 CS4
54 IRQ00
53 IRQ01
51 IRQ02
50 IRQ03
49 IRQ04
48 IRQ05
47 IRQ06
46 IRQ07
30 INTA0
45 IRQ10
44 IRQ11
42 IRQ12
41 IRQ13
40 IRQ14
39 IRQ15
38 IRQ16
37 IRQ17
29 INTA1
64 DSR
68 CTS
56 RCVDT
69 SYNC/BRK
55 RSLCT
60 RCVCLK
57 TRNCLK
1 GATE 0
78 GATE 1
75 GATE 2
2 CLK 0
79 CLK 1
76 CLK 2
15 W
16 R
65 RST
71
DB0 11
DB1 10
DB2 9
DB3 8
DB4 7
DB5 6
DB6 5
DB7 4
C00 28
C01 26
C02 24
SLCT0 36
INT0 34
C10 27
C11 25
C12 23
SLCT1 35
INT1 31
DTR 61
RTS 63
TRNDT 66
TRNRDY 70
RCVRDY 59
TRNEMP/STI 67
OUT0 80
OUT1 77
OUT2 74

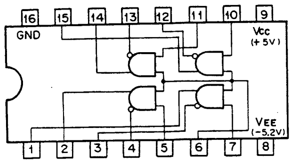
A0, A1 ; ADDRESS BUS
C00 – C02 ; CASCADE CONTROL
CLK0 – CLK2 ; CLOCK IN
CK ; CLOCK FOR REFERANCE OF TIMING
CS0 – CS4 ; CHIP SELECT
CTS ; CLEAR TO SEND
DB0 – DB7 ; DATA BUS
DSR ; DATA SET READY
DTR ; DATA TERMINAL READY
GATE0 – GATE2 ; GATE IN
INT0, INT1 ; INTERRUPT
INTA0, INTA1 ; INTERRUPT ACKNOWLEDGE
IRQ00 – IRQ07 ; INTERRUPT REQUESTS
IRQ10 – IRQ17 ; INTERRUPT REQUESTS
OUT1 – OUT2 ; COUNT OUT
R ; READ
RCVCLK ; RECEIVER CLOCK
RCVDT ; RECEIVE DATA
RCVRDT ; RECEIVER READY
RSLCT ; REGISTER SELECT
RST ; RESET
RTS ; REQUEST TO SEND
SLCT0, SLCT1 ; SELECT
SYNC/BRK ; SYNCHRONIZATION CHARACTOR/ BREAK CODE DETECT
TRNCLK ; TRANSMIT CLOCK
TRNDT ; TRANSMIT DATA
TRNEMP/STI ; TRANSMITTER EMPTY/BAUD RATE CLOCK OUT
TRNRDT ; TRANSMIT READY
W ; WRITE


45,44,42-37 IRQ10-17
27,25,23 C10-12
35 SLCT1
29 INTA1
31 INT1
INTERRUPT CONTROLLER (1)
55 RSLCT
54,53,51-46 IRQ0-7
28,26,24 C0-2
36 SLCT0
30 INTA0
34 INT0
INTERRUPT CONTROLLER (2)
1,75,78 GATE0-2
2,76,79 CLK0-2
80,77,74 OUT0-2
PROGRAMMABLE INTERVAL TIMER
CS1
R,W
CS0
R,W
A1
CS2
R,W
A0
11-4
DB0
DB7
DATA BUS
R,W
16, 15
14,13
A0,A1
ADDRESS BUS
R,W
A0
CS3
CS4
R,W
A0
CHIP SELECT ARBITRABLE CIRCUIT
SERIAL DATA TRANSMITTER/RECEIVER
PROGRAMMABLE BAUD RATE GENERATOR
21-17
CS0~4
64 DSR
68 CTS
56 RCVDT
69 SYNC/BRK
61 DTR
63 RTS
66 TRNDT
70 TRNRDY
59 RCVRDY
65 71 RST,CK
60 RCVCLK
57 TRNCLK
67 TRNEMP /ST1

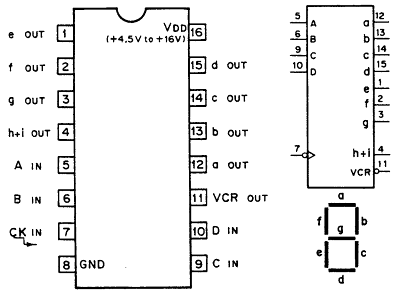
MC10125L (MOTOROLA)
MC10H125M (MOTOROLA) FLAT PACKAGE
ECL ECL-TO-TTL TRANSLATOR
- TOP VIEW -


16
15
14
13
12
11
10
9
GND
Vcc (+5V)
VBB
VEE (-5.2V)
1
2
3
4
5
6
7
8

MC10H124M (MOTOROLA) FLAT PACKAGE
ECL TTL-TO-ECL TRANSLATOR
- TOP VIEW -


16
15
14
13
12
11
10
9
GND
Vcc (+5V)
VEE (-5.2V)
1
2
3
4
5
6
7
8

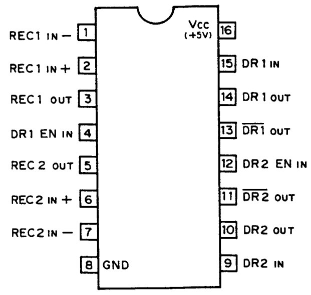
MC14495P1 (MOTOROLA)
C-MOS BCD-TO-SEVEN-SEGMENT 4-BIT LATCH/DECODER DRIVER
- TOP VIEW -


e OUT 1
f OUT 2
g OUT 3
h+i OUT 4
A IN 5
B IN 6
CK IN 7
8 GND
VDD (+4.5V to +16V) 16
15 d OUT
14 c OUT
13 b OUT
12 a OUT
11 VCR OUT
10 D IN
9 C IN
5 A
6 B
9 C
10 D
7
a 12
b 13
c 14
d 15
e 1
f 2
g 3
h+i 4
VCR 11
a
b
c
d
e
f
g

INPUTS					OUTPUTS										DISPLAY
CK	D	C	B	A	a	b	c	d	e	f	g	h+i	VCR	
0	0	0	0	0	1	1	1	1	1	1	0	0	Z	0
0	0	0	0	1	0	1	1	0	0	0	0	0	Z	1
0	0	0	1	0	1	1	0	1	1	0	1	0	Z	2
0	0	0	1	1	1	1	1	1	0	0	1	0	Z	3
0	0	1	0	0	0	1	1	0	0	1	1	0	Z	4
0	0	1	0	1	1	0	1	1	0	1	1	0	Z	5
0	0	1	1	0	1	0	1	1	1	1	1	0	Z	6
0	0	1	1	1	1	1	1	0	0	0	0	0	Z	7
0	1	0	0	0	1	1	1	1	1	1	1	0	Z	8
0	1	0	0	1	1	1	1	1	0	1	1	0	Z	9
0	1	0	1	0	1	1	1	0	1	1	1	1	Z	A
0	1	0	1	1	0	0	1	1	1	1	1	1	Z	b
0	1	1	0	0	1	0	0	1	1	1	0	1	Z	C
0	1	1	0	1	0	1	1	1	1	0	1	1	Z	d
0	1	1	1	0	1	0	0	1	1	1	1	1	Z	E
0	1	1	1	1	1	0	0	0	1	1	1	1	0	F
↑	X	X	X	X	X	X	X	X	X	X	X	X	Z/0	DATA LATCH
1	X	X	X	X	X	X	X	X	X	X	X	X	Z/0	DATA HOLD

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
Z ; HIGH IMPEDANCE

MC34051P (MOTOROLA)
RS-422 DRIVER/RECEIVER
- TOP VIEW -

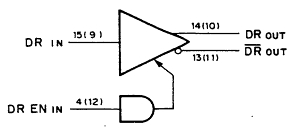

REC1 IN − 1
REC1 IN + 2
REC1 OUT 3
DR1 EN IN 4
REC 2 OUT 5
REC2 IN + 6
REC2 IN − 7
8 GND
Vcc (+5V) 16
15 DR1 IN
14 DR1 OUT
13 $\overline{\text{DR1}}$ OUT
12 DR2 EN IN
11 $\overline{\text{DR2}}$ OUT
10 DR2 OUT
9 DR2 IN

DR EN	MODE
0	DISABLE
1	ENABLE

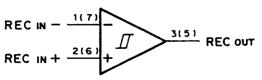
0 ; LOW LEVEL
1 ; HIGH LEVEL

DR ; DRIVER
DR EN ; DRIVER ENABLE
REC ; RECEIVER

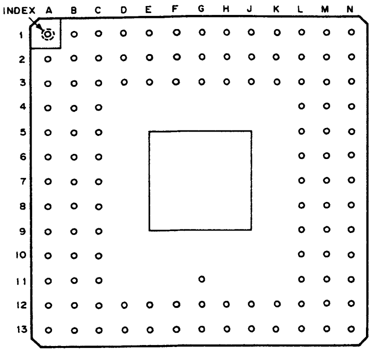
DRIVER CIRCUIT

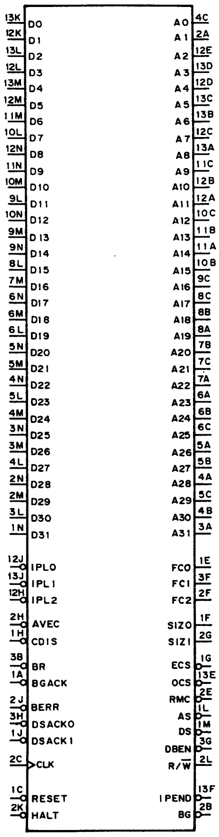

DR IN
15(9)
14(10)
DR OUT
13(11)
$\overline{\text{DR}}$ OUT
DR EN IN
4(12)

RECEIVER CIRCUIT


REC IN −
1(7)
REC IN +
2(6)
3(5)
REC OUT

MC68020RC25 (MOTOROLA)
MC68020RC33 (MOTOROLA) (CLOCK FREQUENCY : 33MHz)
32-BIT MICROPROCESSOR
- BOTTOM VIEW -


INDEX
A
B
C
D
E
F
G
H
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
11
12
13


13K D0
12K D1
13L D2
12L D3
13M D4
12M D5
11M D6
10L D7
12N D8
11N D9
10M D10
9L D11
10N D12
9M D13
9N D14
8L D15
7M D16
6N D17
6M D18
6L D19
5N D20
5M D21
4N D22
5L D23
4M D24
3N D25
3M D26
4L D27
2N D28
2M D29
3L D30
1N D31
12J IPL0
13J IPL1
12H IPL2
2H AVEC
1H CDIS
3B BR
1A BGACK
2J BERR
3H DSACK0
1J DSACK1
2C CLK
1C RESET
2K HALT
A0 4C
A1 2A
A2 12E
A3 13D
A4 12D
A5 13C
A6 13B
A7 12C
A8 13A
A9 11C
A10 12B
A11 12A
A12 10C
A13 11B
A14 11A
A15 10B
A16 9C
A17 8C
A18 8B
A19 8A
A20 7B
A21 7C
A22 7A
A23 6A
A24 6B
A25 6C
A26 5A
A27 5B
A28 4A
A29 5C
A30 4B
A31 3A
FC0 1E
FC1 3F
FC2 2F
SIZ0 1F
SIZ1 2G
ECS 1G
OCS 13E
RMC 2E
AS 1L
DS 1M
DBEN 3G
R/$\overline{\text{W}}$ 2L
IPEND 13F
BG 2B

INPUT

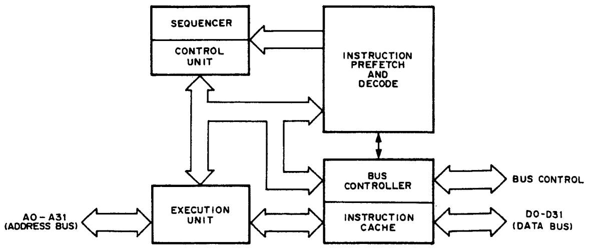
AVEC ; AUTOVECTOR
BERR ; BUS ERROR
BGACK ; BUS GRANT ACKNOWLEDGE
BR ; BUS REQUEST
CDIS ; CACHE DISABLE CONTROL
CLK ; CLOCK
DSACK0,
DSACK1 ; DATA TRANSFER AND SIZE ACKNOWLEDGE
IPL0 − IPL2 ; INTERRUPT PRIORITY CONTROL

OUTPUT

A0 − A31 ; ADDRESS BUS
AS ; ADDRESS STROBE
BG ; BUS GRANT
DBEN ; DATA BUFFER ENABLE
DS ; DATA STROBE
ECS ; EXTERNAL CYCLE START
FC0 − FC2 ; FUNCTION CODE SIGNALS
IPEND ; INTERRUPT PENDING
OCS ; OPERAND CYCLE START
R/$\overline{\text{W}}$; READ/WRITE
RMC ; READ-MODIFY-WRITE CYCLE
SIZ0 − SIZ1 ; TRANSFER SIZE

INPUT/OUTPUT

D0 − D31 ; DATA BUS
HALT ; HALT
RESET ; RESET

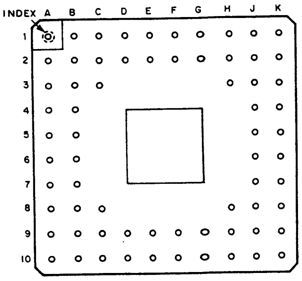

SEQUENCER
CONTROL UNIT
INSTRUCTION PREFETCH AND DECODE
BUS CONTROLLER
BUS CONTROL
EXECUTION UNIT
INSTRUCTION CACHE
A0 - A31 (ADDRESS BUS)
D0-D31 (DATA BUS)

VDD = + 2 to + 6V

PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL
1A	I	BGACK	3D	−	VDD	7B	O	A20	11N	I/O	D9
1B	−	GND	3E	−	VDD	7C	O	A21	12A	O	A11
1C	I/O	RESET	3F	O	FC1	7L	−	GND	12B	O	A10
1D	−	VDD	3G	O	DBEN	7M	I/O	D16	12C	O	A7
1E	O	FC0	3H	I	DSACK0	7N	−	GND	12D	O	A4
1F	O	SIZ0	3J	−	GND	8A	O	A19	12E	O	A2
1G	O	ECS	3K	−	GND	8B	O	A18	12F	−	GND
1H	I	CDIS	3L	I/O	D30	8C	O	A17	12G	−	GND
1J	I	DSACK1	3M	I/O	D26	8L	I/O	D15	12H	I	IPL2
1K	−	GND	3N	I/O	D25	8M	−	VDD	12J	I	IPL0
1L	O	AS	4A	O	A28	8N	−	VDD	12K	I/O	D1
1M	O	DS	4B	O	A30	9A	−	VDD	12L	I/O	D3
1N	I/O	D31	4C	O	A0	9B	−	GND	12M	I/O	D5
2A	O	A1	4L	I/O	D27	9C	O	A16	12N	I/O	D8
2B	O	BG	4M	I/O	D24	9L	I/O	D11	13A	O	A8
2C	I	CLK	4N	I/O	D22	9M	I/O	D13	13B	O	A6
2D	−	VDD	5A	O	A26	9N	I/O	D14	13C	O	A5
2E	O	RMC	5B	O	A27	10A	−	GND	13D	O	A3
2F	O	FC2	5C	O	A29	10B	O	A15	13E	O	OCS
2G	O	SIZ1	5L	I/O	D23	10C	O	A12	13F	O	IPEND
2H	I	AVEC	5M	I/O	D21	10L	I/O	D7	13G	−	VDD
2J	I	BERR	5N	I/O	D20	10M	I/O	D10	13H	−	GND
2K	I/O	HALT	6A	O	A23	10N	I/O	D12	13J	I	IPL1
2L	O	R/$\overline{\text{W}}$	6B	O	A24	11A	O	A14	13K	I/O	D0
2M	I/O	D29	6C	O	A25	11B	O	A13	13L	I/O	D2
2N	I/O	D28	6L	I/O	D19	11C	O	A9	13M	I/O	D4
3A	O	A31	6M	I/O	D18	11G	−	VDD	13N	−	VDD
3B	I	BR	6N	I/O	D17	11L	−	GND			
3C	−	GND	7A	O	A22	11M	I/O	D6			

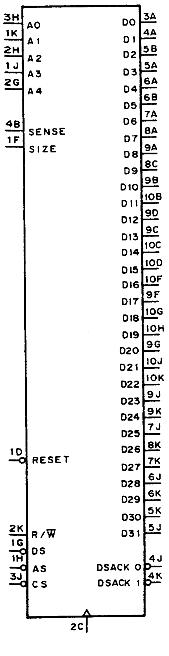
MC68881RC25 (MOTOROLA)
MC68881RC33 (MOTOROLA) (CLOCK FREQUENCY : 33MHz)

C-MOS FLOATING-POINT COPROCESSOR
– BOTTOM VIEW –


INDEX
A
B
C
D
E
F
G
H
J
K
1
2
3
4
5
6
7
8
9
10

VDD = + 2 to + 6V

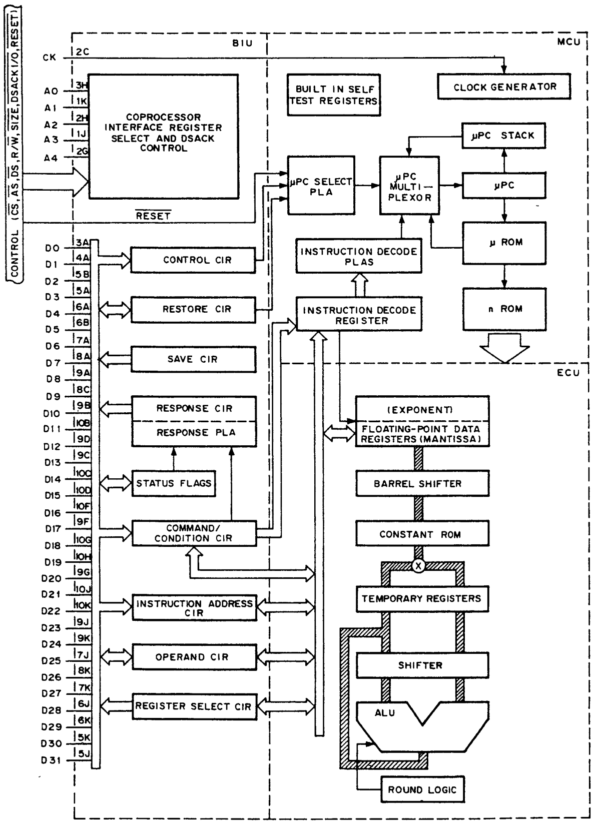
PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1A	–	VDD	2H	I	A2	6A	I/O	D4	9D	I/O	D12
1B	–	VDD	2J	–	VDD	6B	I/O	D5	9E	–	VDD
1C	–	GND	2K	I	R/$\overline{W}$	6J	I/O	D28	9F	I/O	D17
1D	I	RESET	3A	I/O	D0	6K	I/O	D29	9G	I/O	D20
1E	–	NC	3B	–	GND	7A	I/O	D6	9H	–	GND
1F	I	SIZE	3C	–	GND	7B	–	GND	9J	I/O	D23
1G	I	DS	3H	I	A0	7J	I/O	D25	9K	I/O	D24
1H	I	AS	3J	I	CS	7K	I/O	D27	10A	–	GND
1J	I	A3	3K	–	GND	8A	I/O	D7	10B	I/O	D11
1K	I	A1	4A	I/O	D1	8B	–	VDD	10C	I/O	D14
2A	–	GND	4B	I	SENSE	8C	I/O	D9	10D	I/O	D15
2B	–	GND	4J	O	DSACK0	8H	–	VDD	10E	–	GND
2C	I	CK	4K	O	DSACK1	8J	–	GND	10F	I/O	D16
2D	–	GND	5A	I/O	D3	8K	I/O	D26	10G	I/O	D18
2E	–	VDD	5B	I/O	D2	9A	I/O	D8	10H	I/O	D19
2F	–	GND	5J	I/O	D31	9B	I/O	D10	10J	I/O	D21
2G	I	A4	5K	I/O	D30	9C	I/O	D13	10K	I/O	D22


3H A0
1K A1
2H A2
1J A3
2G A4
4B SENSE
1F SIZE
1D RESET
2K R/$\overline{W}$
1G DS
1H AS
3J CS
D0 3A
D1 4A
D2 5B
D3 5A
D4 6A
D5 6B
D6 7A
D7 8A
D8 9A
D9 8C
D10 9B
D11 10B
D12 9D
D13 9C
D14 10C
D15 10D
D16 10F
D17 9F
D18 10G
D19 10H
D20 9G
D21 10J
D22 10K
D23 9J
D24 9K
D25 7J
D26 8K
D27 7K
D28 6J
D29 6K
D30 5K
D31 5J
DSACK 0 4J
DSACK 1 4K
2C

INPUT
A0 – A4 ; ADDRESS
AS ; ADDRESS STROBE
CS ; CHIP SELECT
DS ; DATA STROBE
R/$\overline{W}$; READ/WRITE

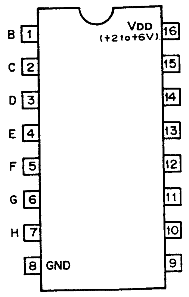
OUTPUT
DSACK0,
DSACK1 ; DATA AND SIZE ACKNOWLEDGE

INPUT/OUTPUT
D0 – D31 ; DATA INPUTS/OUTPUTS


CONTROL (CS, AS, DS, R/W, SIZE, DSACK I/O, RESET)
BIU
MCU
ECU
CK
2C
A0
A1
A2
A3
A4
3H
1K
2H
1J
2G
COPROCESSOR INTERFACE REGISTER SELECT AND DSACK CONTROL
RESET
BUILT IN SELF TEST REGISTERS
CLOCK GENERATOR
μPC STACK
μPC SELECT PLA
μPC MULTI–PLEXOR
μPC
μ ROM
n ROM
INSTRUCTION DECODE PLAS
INSTRUCTION DECODE REGISTER
CONTROL CIR
RESTORE CIR
SAVE CIR
RESPONSE CIR
RESPONSE PLA
STATUS FLAGS
COMMAND/ CONDITION CIR
INSTRUCTION ADDRESS CIR
OPERAND CIR
REGISTER SELECT CIR
(EXPONENT)
FLOATING-POINT DATA REGISTERS (MANTISSA)
BARREL SHIFTER
CONSTANT ROM
TEMPORARY REGISTERS
SHIFTER
ALU
ROUND LOGIC
D0 3A
D1 4A
D2 5B
D3 5A
D4 6A
D5 6B
D6 7A
D7 8A
D8 9A
D9 8C
D10 9B
D11 10B
D12 9D
D13 9C
D14 10C
D15 10D
D16 10F
D17 9F
D18 10G
D19 10H
D20 9G
D21 10J
D22 10K
D23 9J
D24 9K
D25 7J
D26 8K
D27 7K
D28 6J
D29 6K
D30 5K
D31 5J

MC74HC589F (MOTOROLA) FLAT PACKAGE

C-MOS 8-BIT SERIAL OR PARALLEL INPUT/SERIAL OUTPUT SHIFT REGISTER WITH 3-STATE OUTPUT
- TOP VIEW -


B 1
C 2
D 3
E 4
F 5
G 6
H 7
8 GND
VDD (+2to+6V) 16
15 A
14 SA
13 SS/PL
12 LCK
11 SCK
10 OE
9 QH

A-F : PARALLEL DATA INPUTS
LCK : LATCH CLOCK INPUT
OE : OUTPUT ENABLE INPUT
QH : SERIAL DATA OUTPUT
SA : SERIAL DATA INPUT
SCK : SHIFT CLOCK INPUT
SS/PL : SERIAL SHIFT/PARALLEL LOAD

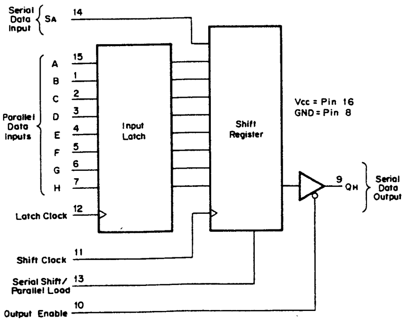
FUNCTION TABLE

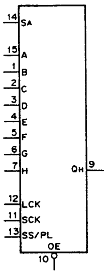
INPUTS						OUTPUT QH	RESULTING FUNCTION
OUTPUT ENABLE	SERIAL SHIFT PARALLEL LOAD	LATCH CLOCK	SHIFT CLOCK	SA	A-H		
H	X	X	X	X	X	Z	QH is in the high impedance state
L	H	↑	L,H,↓	X	a-h	no change	Parallel Data is stored in the input latch. The state of the shift register is unaffected
L	L	↑	X	X	a-h	h	Parallel Data is stored in the input latch and loaded into the shift register
L	L	L,H,↓	L,H,↓	X	X	hL*	Parallel Data stored in the input latch is loaded into the shift register.
L L	H H	X X	↑ ↑	L H	X X	QGN QGN	A low logic level is shifted into the shift register A high logic level is shifted into the shift register
L	H	↑	↑	L,H	L,H	QGN	Serial Date is shifted into the shift register and parallel Date is stored in the input latch.

* hL = the data stored in stage H of the input latch
X = don't care

QGN = Data shifted from stage G
a-h = Data at inputs A-H, respectively
Z = High Impedance State

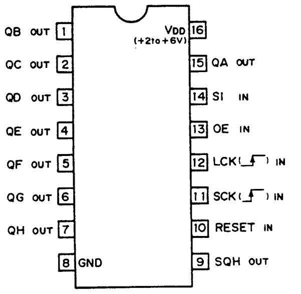
BLOCK DIAGRAM

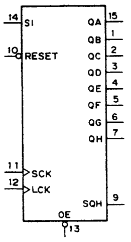

Serial Data Input
SA 14
Parallel Data Inputs
A 15
B 1
C 2
D 3
E 4
F 5
G 6
H 7
Input Latch
Shift Register
Vcc = Pin 16
GND = Pin 8
9 QH
Serial Data Output
Latch Clock 12
Shift Clock 11
Serial Shift/Parallel Load 13
Output Enable 10


14 SA
15 A
1 B
2 C
3 D
4 E
5 F
6 G
7 H
QH 9
12 LCK
11 SCK
13 SS/PL
OE
10

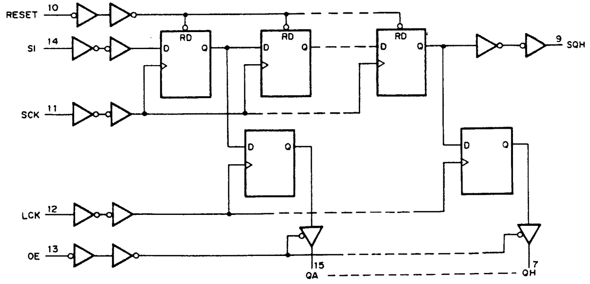
MC74HC595AF (MOTOROLA) FLAT PACKAGE

C-MOS 8-BIT SERIAL-INPUT/SERIAL- OR PARALLEL-OUTPUT SHIFT REGISTER WITH LATCHED 3-STATE OUTPUT
- TOP VIEW -


QB OUT 1
QC OUT 2
QD OUT 3
QE OUT 4
QF OUT 5
QG OUT 6
QH OUT 7
8 GND
VDD (+2to+6V) 16
15 QA OUT
14 SI IN
13 OE IN
12 LCK IN
11 SCK IN
10 RESET IN
9 SQH OUT

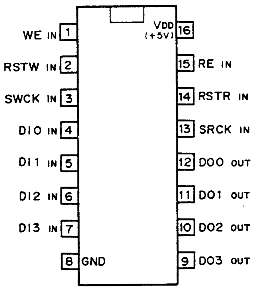

14 SI
10 RESET
11 SCK
12 LCK
QA 15
QB 1
QC 2
QD 3
QE 4
QF 5
QG 6
QH 7
SQH 9
OE
13

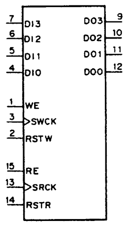
OE ; OUTPUT ENABLE INPUT
LCK ; LATCH CLOCK INPUT
SCK ; SHIFT CLOCK INPUT
RESET ; SHIFT-REGISTER RESET INPUT
SI ; SERIAL IN
QA-QH ; PARALLEL OUTPUTS
SQH ; SERIAL OUT


RESET 10
SI 14
SCK 11
LCK 12
OE 13
RD
D
Q
9 SQH
15 QA
7 QH

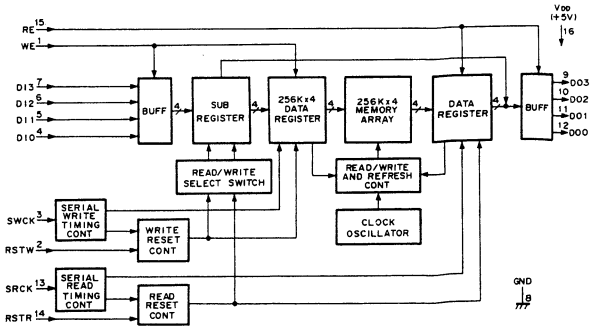
MSM514221-4RS (OKI)

C-MOS 1M(262263x4)-BIT DYNAMIC SERIAL ACCESS MEMORY
- TOP VIEW -


WE IN 1
RSTW IN 2
SWCK IN 3
DI0 IN 4
DI1 IN 5
DI2 IN 6
DI3 IN 7
8 GND
VDD (+5V) 16
15 RE IN
14 RSTR IN
13 SRCK IN
12 DO0 OUT
11 DO1 OUT
10 DO2 OUT
9 DO3 OUT


7 DI3
6 DI2
5 DI1
4 DI0
1 WE
3 SWCK
2 RSTW
15 RE
13 SRCK
14 RSTR
DO3 9
DO2 10
DO1 11
DO0 12

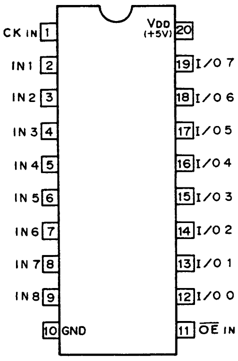
DI0 – DI3	: DATA INPUTS
DO0 – DO3	: DATA OUTPUTS
RE	: READ ENABLE INPUT
RSTR	: READ RESET INPUT
RSTW	: WRITE RESET INPUT
SRCK	: READ CLOCK INPUT
SWCK	: WRITE CLOCK INPUT
WE	: WRITE ENABLE INPUT

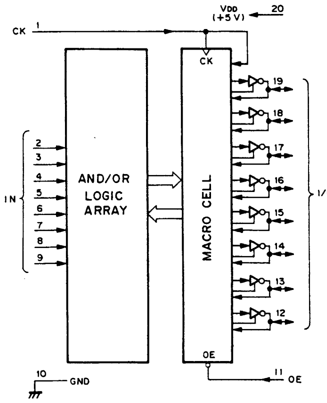

RE 15
WE 1
DI3 7
DI2 6
DI1 5
DI0 4
BUFF
SUB REGISTER
256Kx4 DATA REGISTER
256Kx4 MEMORY ARRAY
DATA REGISTER
BUFF
Vdd (+5V) 16
9 DO3
10 DO2
11 DO1
12 DO0
READ/WRITE SELECT SWITCH
READ/WRITE AND REFRESH CONT
CLOCK OSCILLATOR
SWCK 3
SERIAL WRITE TIMING CONT
RSTW 2
WRITE RESET CONT
SRCK 13
SERIAL READ TIMING CONT
RSTR 14
READ RESET CONT
GND 8
4

PALCE16V8H-15PC (AMD/MONOLITHIC MEMORIES)

C-MOS ELECTRICALLY ERASABLE PROGRAMMABLE LOGIC DEVICE

– TOP VIEW –


CK IN 1
IN1 2
IN2 3
IN3 4
IN4 5
IN5 6
IN6 7
IN7 8
IN8 9
10 GND
VDD (+5V) 20
19 I/O 7
18 I/O 6
17 I/O 5
16 I/O 4
15 I/O 3
14 I/O 2
13 I/O 1
12 I/O 0
11 OE IN

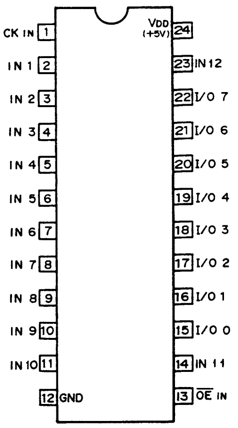

CK 1
VDD (+5V) 20
CK
IN
AND/OR LOGIC ARRAY
MACRO CELL
I/O
OE
10 GND
11 OE

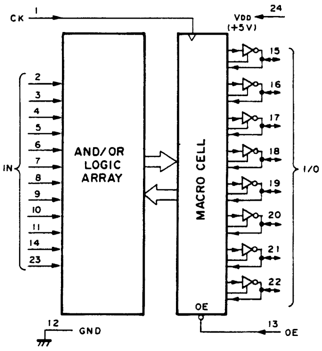
* ABOVE DIAGRAM SHOWS CONDITIONS BEFORE PROGRAMMING.

PALCE20V8H-15PC (AMD/MONOLITHIC MEMORIES)

C-MOS ELECTRICALLY ERASABLE PROGRAMMABLE LOGIC DEVICE

– TOP VIEW –


CK IN 1
IN 1 2
IN 2 3
IN 3 4
IN 4 5
IN 5 6
IN 6 7
IN 7 8
IN 8 9
IN 9 10
IN 10 11
12 GND
VDD (+5V) 24
23 IN 12
22 I/O 7
21 I/O 6
20 I/O 5
19 I/O 4
18 I/O 3
17 I/O 2
16 I/O 1
15 I/O 0
14 IN 11
13 OE IN

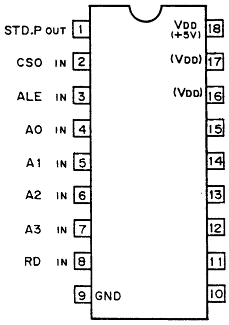

CK 1
VDD (+5V) 24
IN
AND/OR LOGIC ARRAY
MACRO CELL
I/O
OE
12 GND
13 OE

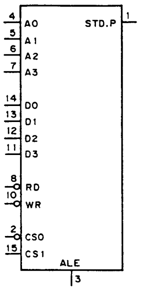
* ABOVE DIAGRAM SHOWS CONDITIONS BEFORE PROGRAMMING.

RTC-62421B (EPSON)

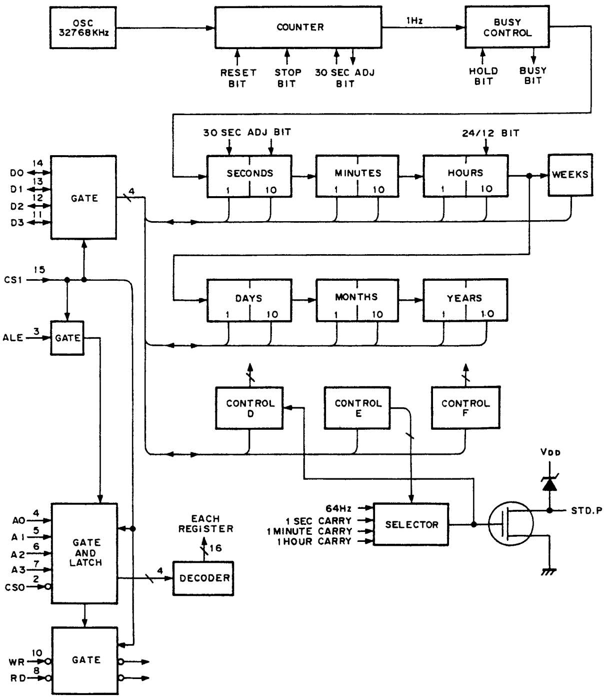
C-MOS REAL TIME CLOCK

– TOP VIEW –


STD.P OUT 1
CSO IN 2
ALE IN 3
A0 IN 4
A1 IN 5
A2 IN 6
A3 IN 7
RD IN 8
9 GND
VDD (+5V) 18
(VDD) 17
(VDD) 16
15 CS1 IN
14 D0 I/O
13 D1 I/O
12 D2 I/O
11 D3 I/O
10 WR IN

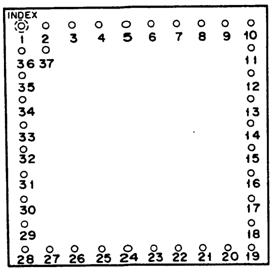

4 A0
5 A1
6 A2
7 A3
14 D0
13 D1
12 D2
11 D3
8 RD
10 WR
2 CS0
15 CS1
STD.P 1
ALE 3

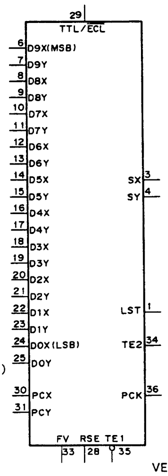
A0 – A3 ; ADDRESS BUS INPUTS
ALE ; ADDRESS LATCH ENABLE INPUT
CS0, CS1 ; CHIP SELECT INPUTS
D0 – D3 ; DATA BUS INPUTS/OUTPUTS
RD ; READ INPUT
STD.P ; STANDARD PULSE OUTPUT
WR ; WRITE INPUT


OSC 32768KHz
COUNTER
1Hz
BUSY CONTROL
RESET BIT
STOP BIT
30 SEC ADJ BIT
HOLD BIT
BUSY BIT
30 SEC ADJ BIT
24/12 BIT
SECONDS 1 10
MINUTES 1 10
HOURS 1 10
WEEKS
DAYS 1 10
MONTHS 1 10
YEARS 1 10
D0 14
D1 13
D2 12
D3 11
GATE
4
CS1 15
ALE 3
GATE
CONTROL D
CONTROL E
CONTROL F
VDD
STD.P
64Hz
1 SEC CARRY
1 MINUTE CARRY
1 HOUR CARRY
SELECTOR
A0 4
A1 5
A2 6
A3 7
CS0 2
GATE AND LATCH
EACH REGISTER
16
DECODER
WR 10
RD 8
GATE

SBX1601A (SONY)

8- OR 10-BIT PARALLEL-TO-SERIAL CONVERTER
- BOTTOM VIEW -


INDEX
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19
20 21 22 23 24 25 26 27 28
29 30 31 32 33 34 35 36 37


29 TTL/ECL
6 D9X(MSB)
7 D9Y
8 D8X
9 D8Y
10 D7X
11 D7Y
12 D6X
13 D6Y
14 D5X
15 D5Y
16 D4X
17 D4Y
18 D3X
19 D3Y
20 D2X
21 D2Y
22 D1X
23 D1Y
24 D0X(LSB)
25 D0Y
30 PCX
31 PCY
SX 3
SY 4
LST 1
TE2 34
PCK 36
FV 33
RSE 28
TE1 35

INPUT
D9X – D0X, D9Y – D0Y :
PARALLEL DATA INPUTS
PCX, PCY : PARALLEL CLOCK INPUTS
FV : VCO FREQ. ADJ. INPUT
RSE : VCO RANGE SELECT INPUT (H : HIGH RANGE)
TE1 : TEST TERMINAL (LOW = TEST)
TTL/$\overline{\text{ECL}}$: VCC FOR INPUT LEVEL SELECT
(+5V = TTL, GND = ECL)

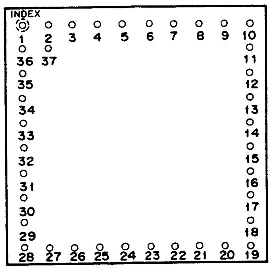
OUTPUT
LST : PLL LOCK DETECT OUTPUT (H : LOCK)
PCK : PARALLEL CLOCK OUTPUT
SX, SY : SERIAL DATA OUTPUTS
TE2 : TEST TERMINAL

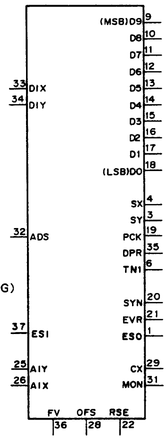
VEE1 = – 5V
VEE2 = – 3.5V

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	O	LST	11	I	D7Y	21	I	D2Y	31	I	PCY
2	–	GND	12	I	D6X	22	I	D1X	32	–	GND
3	O	SX	13	I	D6Y	23	I	D1Y	33	I	FV
4	O	SY	14	I	D5X	24	I	D0X(LSB)	34	O	TE2
5	–	GND	15	I	D5Y	25	I	D0Y	35	I	TE1
6	I	D9X(MSB)	16	I	D4X	26	–	VEE1	36	O	PCK
7	I	D9Y	17	I	D4Y	27	–	VEE2	37	–	NC
8	I	D8X	18	I	D3X	28	I	RSE			
9	I	D8Y	19	I	D3Y	29	–	TTL/$\overline{\text{ECL}}$			
10	I	D7X	20	I	D2X	30	I	PCX			

SBX1602A (SONY)

8- OR 10-BIT SERIAL-TO-PARALLEL CONVERTER
- BOTTOM VIEW -


INDEX
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19
20 21 22 23 24 25 26 27 28
29 30 31 32 33 34 35 36 37


33 DIX
34 DIY
32 ADS
37 ESI
25 AIY
26 AIX
(MSB)D9 9
D8 10
D7 11
D6 12
D5 13
D4 14
D3 15
D2 16
D1 17
(LSB)D0 18
SX 4
SY 3
PCK 19
DPR 35
TN1 6
SYN 20
EVR 21
ESO 1
CX 29
MON 31
FV 36
OFS 28
RSE 22

INPUT
ADS : SERIAL DATA SELECT INPUT (H : DIGITAL, L : ANALOG)
AIX, AIY : EQUALIZER INPUTS
DIX, DIY : SERIAL DATA INPUTS
ESI : PLL SIGNAL INPUT
OFS : AGC OFFSET ADJ. INPUT
FV : VCO FREQ. ADJ. INPUT
RSE : VCO RANGE SELECT INPUT (H : HIGH RANGE)

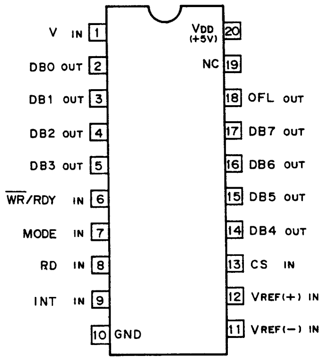
OUTPUT
CX : EQUALIZER DETECT OUTPUT (L : NO INPUT)
D9 – D0 : PARALLEL DATA OUTPUTS
DPR : SERIAL DATA DETECT OUTPUT (L : NO INPUT)
ESO : TEST NODE PLL ERRROR SIGNAL OUTPUT
EVR : REFERENCE VOLTAGE FOR PARALLEL OUTPUT
MON : EQUALIZER MONITOR OUTPUT
PCK : PARALLEL CLOCK OUTPUT
SX, SY : SERIAL DATA OUTPUTS
SYN : TRS DETECT OUTPUT
TN1 : TEST TERMINAL

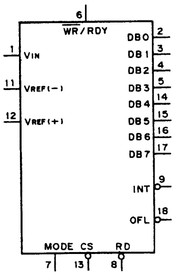
VEE1, 3 = – 5V
VEE2 = – 3.5V

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	O	ESO	11	O	D7	21	O	EVR	31	O	MON
2	–	GND	12	O	D6	22	I	RSE	32	I	ADS
3	O	SY	13	O	D5	23	–	VEE3	33	I	DIX
4	O	SX	14	O	D4	24	–	GND	34	I	DIY
5	–	GND	15	O	D3	25	I	AIY	35	O	DPR
6	O	TN1	16	O	D2	26	I	AIX	36	I	FV
7	–	VEE1	17	O	D1	27	–	GND	37	I	ESI
8	–	VEE2	18	O	D0(LSB)	28	I	OFS			
9	O	D9(MSB)	19	O	PCK	29	O	CX			
10	O	D8	20	O	SYN	30	–	GND			

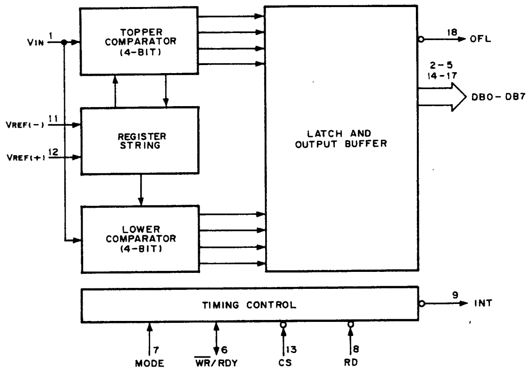
SM6103S (NPC) FLAT PACKAGE

C-MOS 8-BIT A/D CONVERTOR
- TOP VIEW -


V IN 1
DB0 OUT 2
DB1 OUT 3
DB2 OUT 4
DB3 OUT 5
WR/RDY IN 6
MODE IN 7
RD IN 8
INT IN 9
10 GND
VDD (+5V) 20
NC 19
18 OFL OUT
17 DB7 OUT
16 DB6 OUT
15 DB5 OUT
14 DB4 OUT
13 CS IN
12 VREF(+) IN
11 VREF(–) IN

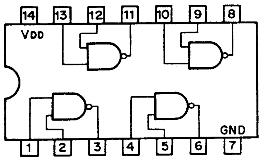

6 WR/RDY
1 VIN
11 VREF(–)
12 VREF(+)
DB0 2
DB1 3
DB2 4
DB3 5
DB4 14
DB5 15
DB6 16
DB7 17
INT 9
OFL 18
MODE 7
CS 13
RD 8

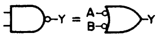
CS : CHIP SELECT INPUT
DB0 – DB7 : DIGITAL DATA OUTPUTS
INT : INTERRUPT OUTPUT
MODE : MODE SELECT INPUT (WR-RD MODE/RD MODE)
OFL : OVERFLOW OUTPUT
RD : READ INPUT
VIN : ANALOG VOLTAGE INPUT
VREF (+) : TOP REFERENCE VOLTAGE INPUT
VREF (–) : BOTTOM REFERENCE VOLTAGE INPUT
$\overline{\text{WR}}$/RDY : WR-RD MODE → $\overline{\text{WR}}$ INPUT
RD MODE → RDY INPUT


VIN 1
TOPPER COMPARATOR (4-BIT)
VREF(–) 11
VREF(+) 12
REGISTER STRING
LOWER COMPARATOR (4-BIT)
LATCH AND OUTPUT BUFFER
18 OFL
2-5 14-17
DB0 - DB7
TIMING CONTROL
9 INT
7 MODE
6 WR/RDY
13 CS
8 RD

SN74HC00NS (TI) FLAT PACKAGE
TC74AC00F (TOSHIBA) FLAT PACKAGE

C-MOS QUAD 2-INPUT NAND GATE
- TOP VIEW -


14 13 12 11 10 9 8
VDD
GND
1 2 3 4 5 6 7



$Y = \overline{A \cdot B} = \overline{A} + \overline{B}$

A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

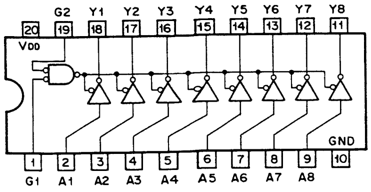
0; LOW LEVEL
1; HIGH LEVEL

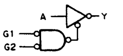
NOTE :

TYPE	VDD
TC74AC00P TC74AC00F	+2 to +5.5V
MC74HCT00N 74ACT00PC	+5V
OTHER TYPES	+2 to +6V

SN74HC540NS (TI) FLAT PACKAGE
TC74AC540F (TOSHIBA) FLAT PACKAGE

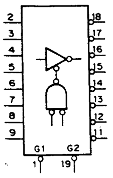
C-MOS 3-STATE INVERTING BUFFER/LINE DRIVER/LINE RECEIVER
- TOP VIEW -


G2 Y1 Y2 Y3 Y4 Y5 Y6 Y7 Y8
20 19 18 17 16 15 14 13 12 11
VDD
GND
1 2 3 4 5 6 7 8 9 10
G1 A1 A2 A3 A4 A5 A6 A7 A8



G1	G2	A	Y
0	0	0	1
0	0	1	0
1	X	X	HI-Z
X	1	X	HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE

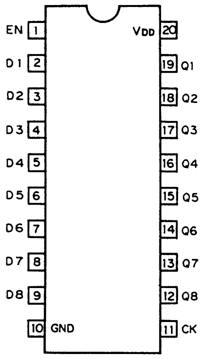

2 3 4 5 6 7 8 9
18 17 16 15 14 13 12 11
G1 G2
1 19

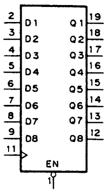
NOTE :

TYPE	VDD
TC74AC540F TC74AC540P	+5V
OTHER TYPES	+2 to +6V

SN74HC574ANS (TI) FLAT PACKAGE
SN74HC574NS (TI) FLAT PACKAGE
TC74AC574F (TOSHIBA) FLAT PACKAGE

C-MOS 3-STATE D-TYPE EDGE-TRIGGERED FLIP-FLOP
- TOP VIEW -

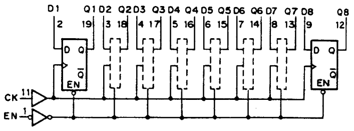

EN 1
D1 2
D2 3
D3 4
D4 5
D5 6
D6 7
D7 8
D8 9
10 GND
VDD 20
19 Q1
18 Q2
17 Q3
16 Q4
15 Q5
14 Q6
13 Q7
12 Q8
11 CK


2 D1 Q1 19
3 D2 Q2 18
4 D3 Q3 17
5 D4 Q4 16
6 D5 Q5 15
7 D6 Q6 14
8 D7 Q7 13
9 D8 Q8 12
11
EN
1

EACH FLIP-FLOP

INPUTS			OUT
EN	CK	D	Q
0	↑	1	1
0	↑	0	0
0	↓	X	Qo
1	X	X	HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI - Z ; HIGH IMPEDANCE
Qo ; NO CHANGE

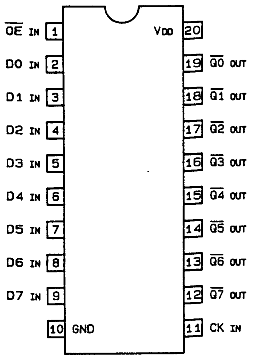

D1 Q1 D2 Q2 D3 Q3 D4 Q4 D5 Q5 D6 Q6 D7 Q7 D8 Q8
2 19 3 18 4 17 5 16 6 15 7 14 8 13 9 12
D Q
Q̄
EN
CK 11
EN 1

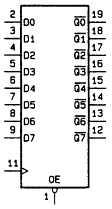
NOTE :

TYPE	VDD
74AC/74HC	+ 2 to + 6V
74ACT/74HCT	+ 5V
TC74AC574F	+ 2 to + 5.5V

SN74HC564NS (TI) FLAT PACKAGE
TC74AC564F (TOSHIBA) FLAT PACKAGE

C-MOS D-TYPE FLIP-FLOPS WITH 3-STATE OUTPUTS
- TOP VIEW -


OE IN 1
D0 IN 2
D1 IN 3
D2 IN 4
D3 IN 5
D4 IN 6
D5 IN 7
D6 IN 8
D7 IN 9
10 GND
VDD 20
19 Q̄0 OUT
18 Q̄1 OUT
17 Q̄2 OUT
16 Q̄3 OUT
15 Q̄4 OUT
14 Q̄5 OUT
13 Q̄6 OUT
12 Q̄7 OUT
11 CK IN

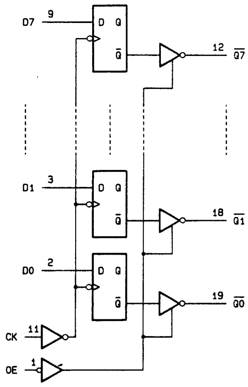

2 D0 Q̄0 19
3 D1 Q̄1 18
4 D2 Q̄2 17
5 D3 Q̄3 16
6 D4 Q̄4 15
7 D5 Q̄5 14
8 D6 Q̄6 13
9 D7 Q̄7 12
11
OE
1

OE	CK	D	Q̄
1	X	X	HI-Z
0	↓	X	Q̄n
0	↑	0	1
0	↑	1	0

0 : LOW LEVEL
1 : HIGH LEVEL
X : DON'T CARE
HI-Z : HIGH IMPEDANCE
Q̄n : NO CHANGE

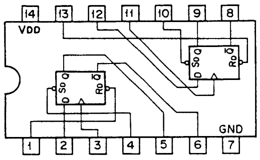
NOTE :

TYPE	VDD
74HC	+2 to +6V
74HCT	+5V
74AC	+2 to +5.5V


D7 9
D Q
Q̄
12 Q̄7
D1 3
18 Q̄1
D0 2
19 Q̄0
CK 11
OE 1

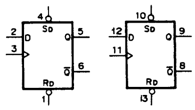
SN74HC74NS (TI) FLAT PACKAGE
TC74AC74F (TOSHIBA) FLAT PACKAGE
TC74ACT74F (TOSHIBA) FLAT PACKAGE

C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET
- TOP VIEW -


14 13 12 11 10 9 8
VDD
SD RD
GND
1 2 3 4 5 6 7

INPUTS				OUTPUTS	
S̄D	R̄D	CK	D	Qn+1	Q̄n+1
0	1	X	X	1	0
1	0	X	X	0	1
0	0	X	X	1	1
1	1	↑	1	1	0
1	1	↑	0	0	1
1	1	0	X	Qn	Q̄n

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

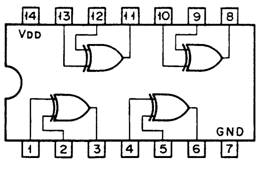

4 SD 2 D Q 5 3 Q̄ 6 RD 1
10 SD 12 D Q 9 11 Q̄ 8 RD 13

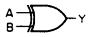
NOTE :

TYPE	VDD
74ACT	+5V
TC74AC74F	+2 to +5.5V
TC74ACT74F	+4.5 to +5.5V
OTHER TYPES	+2 to +6V

SN74HC86ANS (TI) FLAT PACKAGE

C-MOS EXCLUSIVE OR GATE
- TOP VIEW -


14 13 12 11 10 9 8
VDD
GND
1 2 3 4 5 6 7



$Y = \bar{A} \cdot B + A \cdot \bar{B}$

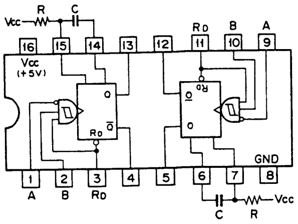
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

TYPE	VDD
TC74AC86F	+2 to +5.5V
OTHER TYPES	+2 to +6V

SN74LS221NS (TI) FLAT PACKAGE

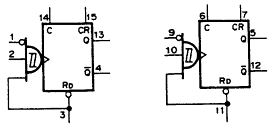
TTL MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT
- TOP VIEW -


R
C
Vcc
RD
B
A
16
15
14
13
12
11
10
9
Vcc (+5V)
GND
1
2
3
4
5
6
7
8
A
B
RD
C
R
Vcc

INPUTS			OUTPUTS	
RD	A	B	Q	$\overline{Q}$
0	X	X	0	1
X	1	X	0	1
X	X	0	0	1
1	0	↑	⎍	⊔
1	↓	1	⎍	⊔
↑	0	1	⎍	⊔

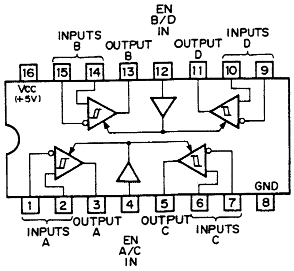
0;LOW LEVEL
1;HIGH LEVEL
X;DON'T CARE

OUTPUT PULSE WIDTH = 0.7CR


14
15
C
CR
Q
$\overline{Q}$
RD
1
2
13
4
3
6
7
9
10
5
12
11

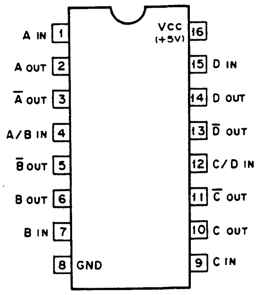
SN75ALS194N (TI)

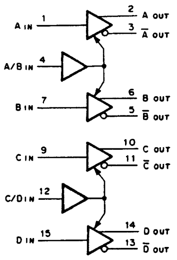
QUAD RS-422 LINE DRIVER WITH 3-STATE OUTPUTS
- TOP VIEW -


EN B/D IN
INPUTS B
OUTPUT B
OUTPUT D
INPUTS D
16
15
14
13
12
11
10
9
Vcc (+5V)
GND
1
2
3
4
5
6
7
8
INPUTS A
OUTPUT A
EN A/C IN
OUTPUT C
INPUTS C

SN75ALS195J (TI)

QUAD RS-422/423 LINE RECEIVER WITH 3-STATE OUTPUTS
- TOP VIEW -


A IN 1
A OUT 2
$\overline{A}$ OUT 3
A/B IN 4
$\overline{B}$ OUT 5
B OUT 6
B IN 7
8 GND
VCC (+5V) 16
15 D IN
14 D OUT
13 $\overline{D}$ OUT
12 C/D IN
11 $\overline{C}$ OUT
10 C OUT
9 C IN

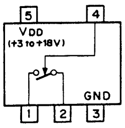

A IN 1
2 A OUT
3 $\overline{A}$ OUT
A/B IN 4
B IN 7
6 B OUT
5 $\overline{B}$ OUT
C IN 9
10 C OUT
11 $\overline{C}$ OUT
C/D IN 12
D IN 15
14 D OUT
13 $\overline{D}$ OUT

A, B, C, D IN	A/B, C/D IN	A, B, C, D OUT	$\overline{A}, \overline{B}, \overline{C}, \overline{D}$ OUT
0	0	0	1
1	0	1	0
X	1	HI-Z	HI-Z

0 : LOW LEVEL
1 : HIGH LEVEL
X : DON'T CARE
HI-Z : HIGH IMPEDANCE

TC4S66F (TOSHIBA)

C-MOS BILATERAL ANALOG SWITCH
- TOP VIEW -


5
4
VDD (+3 to +18V)
GND
1
2
3

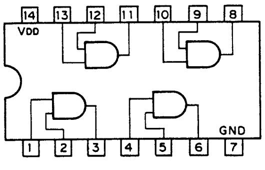
IN/OUT
IN/OUT
CONTROL

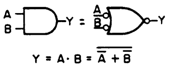
CONTROL	SWITCH
0	OFF
1	ON

0; LOW LEVEL
1; HIGH LEVEL

TC74AC08F (TOSHIBA) FLAT PACKAGE

C-MOS QUAD 2-INPUT AND GATE
- TOP VIEW -


14
13
12
11
10
9
8
VDD
GND
1
2
3
4
5
6
7


A
B
Y
Y = A · B = $\overline{\overline{A} + \overline{B}}$

A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

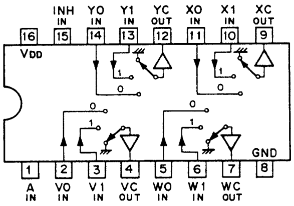
0; LOW LEVEL
1; HIGH LEVEL

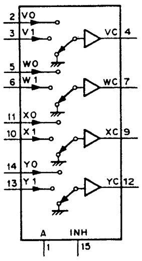
NOTE :

TYPE	VDD
TC74AC08F	+2 to +5.5V
OTHER TYPES	+2 to +6V

TC74AC157F (TOSHIBA) FLAT PACKAGE

C-MOS QUAD 2-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
- TOP VIEW -


INH IN
YO IN
Y1 IN
YC OUT
XO IN
X1 IN
XC OUT
16
15
14
13
12
11
10
9
VDD
GND
1
2
3
4
5
6
7
8
A IN
VO IN
V1 IN
VC OUT
WO IN
W1 IN
WC OUT


2 VO
3 V1
VC 4
5 WO
6 W1
WC 7
11 XO
10 X1
XC 9
14 YO
13 Y1
YC 12
A
INH
1
15

NOTE :

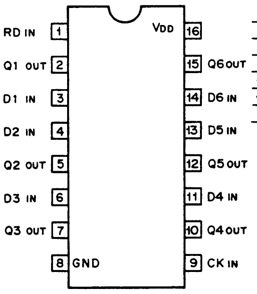
TYPE	VDD
74ACT157	+5V
TC74AC157P TC74AC157F	+2 to +5.5V
OTHER TYPES	+2 to +6V

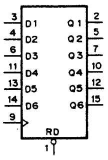
CONT. IN		ON CHANNEL
INH	A	
0	0	0
0	1	1
1	X	GND

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

TC74AC174F (TOSHIBA) FLAT PACKAGE

C-MOS D-TYPE FLIP-FLOP WITH RESET
- TOP VIEW -

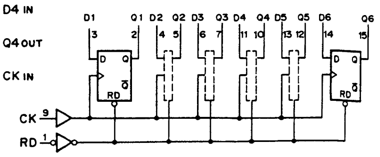

RD IN 1
Q1 OUT 2
D1 IN 3
D2 IN 4
Q2 OUT 5
D3 IN 6
Q3 OUT 7
8 GND
VDD 16
15 Q6 OUT
14 D6 IN
13 D5 IN
12 Q5 OUT
11 D4 IN
10 Q4 OUT
9 CK IN


3
4
6
11
13
14
9
D1
D2
D3
D4
D5
D6
Q1
Q2
Q3
Q4
Q5
Q6
2
5
7
10
12
15
RD
1

EACH FLIP - FLOP

INPUT			OUT
RD	CK	D	Q
0	X	X	0
1	_⎾	0	0
1	_⎾	1	1
1	0	X	Qo

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE


D1
Q1
D2
Q2
D3
Q3
D4
Q4
D5
Q5
D6
Q6
3
2
4
5
6
7
11
10
13
12
14
15
D
Q
RD
$\overline{Q}$
CK 9
RD 1

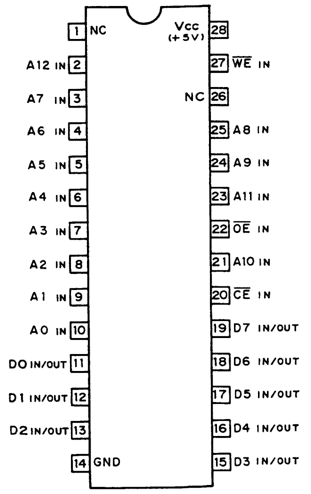
NOTE :

TYPE	VDD
74AC	+3.3 to +5V
74ACT	+5V
74HC	+2 to +6V
TC74AC174F	+2 to +5.5V

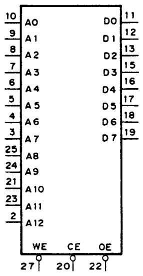
uPD28C64C-20 (NEC) (ACCESS TIME = 200nS)

C-MOS 64K (8Kx8) ELECTRICALLY ERASABLE PROM

– TOP VIEW –

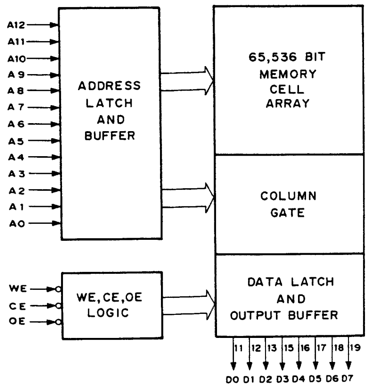


1 NC
A12 IN 2
A7 IN 3
A6 IN 4
A5 IN 5
A4 IN 6
A3 IN 7
A2 IN 8
A1 IN 9
A0 IN 10
D0 IN/OUT 11
D1 IN/OUT 12
D2 IN/OUT 13
14 GND
Vcc (+5V) 28
27 WE IN
NC 26
25 A8 IN
24 A9 IN
23 A11 IN
22 OE IN
21 A10 IN
20 CE IN
19 D7 IN/OUT
18 D6 IN/OUT
17 D5 IN/OUT
16 D4 IN/OUT
15 D3 IN/OUT



10 A0
9 A1
8 A2
7 A3
6 A4
5 A5
4 A6
3 A7
25 A8
24 A9
21 A10
23 A11
2 A12
D0 11
D1 12
D2 13
D3 15
D4 16
D5 17
D6 18
D7 19
WE 27
CE 20
OE 22

A0 – A12 ; ADDRESS INPUTS
D0 – D7 ; DATA INPUTS/OUTPUTS
WE ; WRITE ENABLE INPUT
CE ; CHIP ENABLE INPUT
OE ; OUTPUT ENABLE INPUT

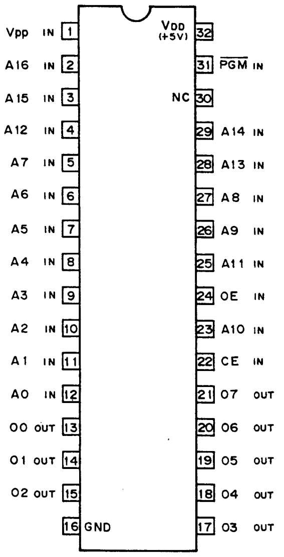


A12
A11
A10
A9
A8
A7
A6
A5
A4
A3
A2
A1
A0
ADDRESS LATCH AND BUFFER
65,536 BIT MEMORY CELL ARRAY
COLUMN GATE
WE
CE
OE
WE,CE,OE LOGIC
DATA LATCH AND OUTPUT BUFFER
11 12 13 15 16 17 18 19
D0 D1 D2 D3 D4 D5 D6 D7

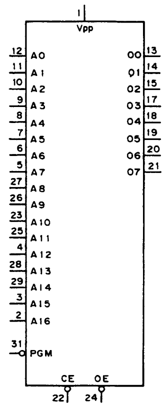
WS27C010L-12D (WSI)

C-MOS 1M (131,072x8)-BIT UV ERASABLE PROM

– TOP VIEW –



Vpp IN 1
A16 IN 2
A15 IN 3
A12 IN 4
A7 IN 5
A6 IN 6
A5 IN 7
A4 IN 8
A3 IN 9
A2 IN 10
A1 IN 11
A0 IN 12
O0 OUT 13
O1 OUT 14
O2 OUT 15
16 GND
VDD (+5V) 32
31 PGM IN
NC 30
29 A14 IN
28 A13 IN
27 A8 IN
26 A9 IN
25 A11 IN
24 OE IN
23 A10 IN
22 CE IN
21 O7 OUT
20 O6 OUT
19 O5 OUT
18 O4 OUT
17 O3 OUT



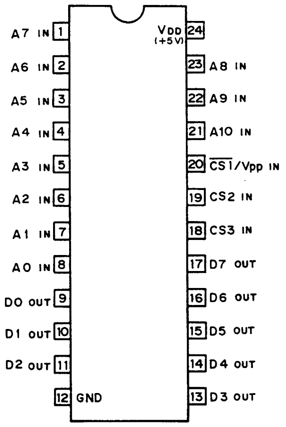
1 Vpp
12 A0
11 A1
10 A2
9 A3
8 A4
7 A5
6 A6
5 A7
27 A8
26 A9
23 A10
25 A11
4 A12
28 A13
29 A14
3 A15
2 A16
31 PGM
O0 13
O1 14
O2 15
O3 17
O4 18
O5 19
O6 20
O7 21
CE 22
OE 24

A0 – A16 ; ADDRESS INPUTS
D0 – D7 ; DATA OUTPUTS
CE ; CHIP ENABLE INPUT
OE ; OUTPUT ENABLE INPUT
PGM ; PROGRAM INPUT

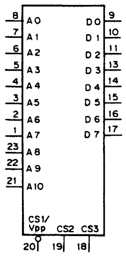
WS57C291B-35T (WSI)

C-MOS 16K-BIT (2048x8) HIGH SPEED ERASABLE P-ROM

– TOP VIEW –

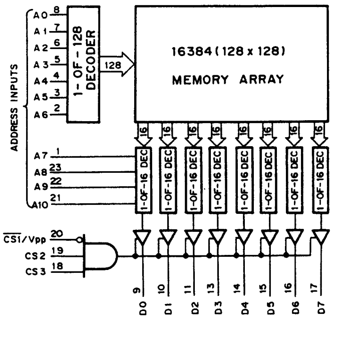


A7 IN 1
A6 IN 2
A5 IN 3
A4 IN 4
A3 IN 5
A2 IN 6
A1 IN 7
A0 IN 8
D0 OUT 9
D1 OUT 10
D2 OUT 11
12 GND
VDD (+5V) 24
23 A8 IN
22 A9 IN
21 A10 IN
20 CS1/Vpp IN
19 CS2 IN
18 CS3 IN
17 D7 OUT
16 D6 OUT
15 D5 OUT
14 D4 OUT
13 D3 OUT



8 A0
7 A1
6 A2
5 A3
4 A4
3 A5
2 A6
1 A7
23 A8
22 A9
21 A10
D0 9
D1 10
D2 11
D3 13
D4 14
D5 15
D6 16
D7 17
CS1/Vpp 20
CS2 19
CS3 18

A0 – A12 ; ADDRESS INPUTS
D0 – D7 ; DATA OUTPUTS
CS1 – CS3 ; CHIP SELECT INPUT
VPP ; PROGRAM POWER SUPPLY



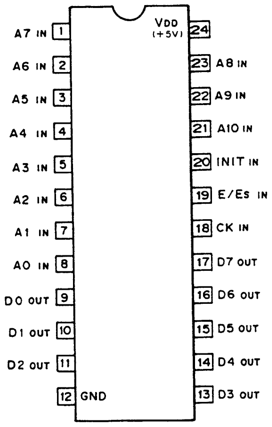
ADDRESS INPUTS
A0 8
A1 7
A2 6
A3 5
A4 4
A5 3
A6 2
1-OF-128 DECODER
128
16384 (128 x 128) MEMORY ARRAY
16
1-OF-16 DEC
A7 1
A8 23
A9 22
A10 21
CS1/Vpp 20
CS2 19
CS3 18
9 10 11 13 14 15 16 17
D0 D1 D2 D3 D4 D5 D6 D7

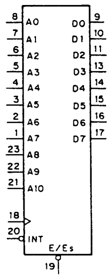
CHIP SEL			OUTPUT
CS1/VPP	CS2	CS3	
0	1	1	ENABLE
1	0	X	HI-IMPEDANCE
1	X	0	

0 : LOW LEVEL
1 : HIGH LEVEL
X : DON'T CARE

WS57C45-35T (WSI) (ACCESS TIME = 35nS)

C-MOS 16K(2048x8)-BIT EPROM (WITH REGISTER)
– TOP VIEW –

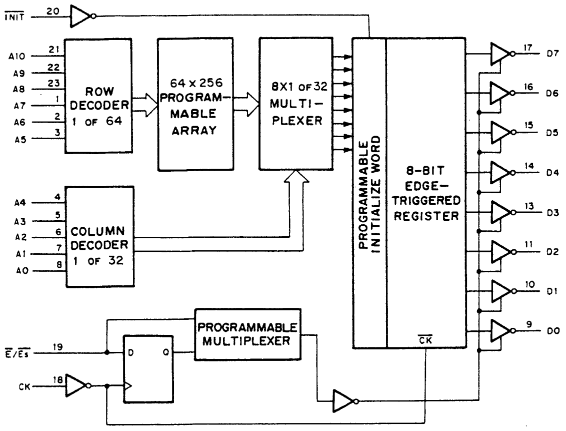

A7 IN 1
A6 IN 2
A5 IN 3
A4 IN 4
A3 IN 5
A2 IN 6
A1 IN 7
A0 IN 8
D0 OUT 9
D1 OUT 10
D2 OUT 11
12 GND
VDD (+5V) 24
23 A8 IN
22 A9 IN
21 A10 IN
20 INIT IN
19 E/Es IN
18 CK IN
17 D7 OUT
16 D6 OUT
15 D5 OUT
14 D4 OUT
13 D3 OUT


A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
INT
E/Es
D0
D1
D2
D3
D4
D5
D6
D7

A0-A10 ; ADDRESS INPUTS
CK ; CLOCK INPUT
E ; SYNCHRONOUS ENABLE INPUT
ES ; ASYNCHRONOUS ENABLE INPUT
INIT ; ASYNCHRONOUS INITIALIZATION
D0-D7 ; DATA OUTPUTS

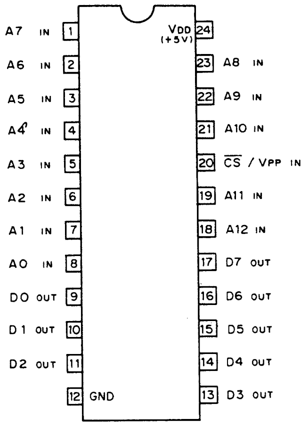
A1	A2	CK	E/ES	INIT	OUTPUTS	FUNCTION
X	X	X	0	1	DATA OUT	READ
X	X	X	1	1	HI-Z	OUTPUT DISABLE
X	X	0	1	Vpp	DATA IN	PGM
X	X	1	0	Vpp	DATA OUT	PGM VERIFY
X	X	1	1	Vpp	HI-Z	PGM INH
X	X	0	1	Vpp	DATA IN	INTELLIGENT PGM
Vpp	1	0	1	Vpp	HI-Z	PGM SYNCH ENABLE
Vpp	0	0	1	Vpp	DATA IN	PGM INITIAL BYTE
X	X	Vpp	1	0	ZEROS	BLANK CHECK ZEROS

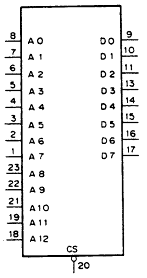
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE
VPP ; PROGRAM POWER SUPPLY
(+13V to +14V)


INIT
20
A10
A9
A8
A7
A6
A5
21
22
23
1
2
3
ROW DECODER 1 OF 64
64 x 256 PROGRAM-MABLE ARRAY
8X1 OF 32 MULTI-PLEXER
PROGRAMMABLE INITIALIZE WORD
8-BIT EDGE-TRIGGERED REGISTER
A4
A3
A2
A1
A0
4
5
6
7
8
COLUMN DECODER 1 OF 32
PROGRAMMABLE MULTIPLEXER
E/Es
19
CK
18
D
Q
CK
17 D7
16 D6
15 D5
14 D4
13 D3
11 D2
10 D1
9 D0

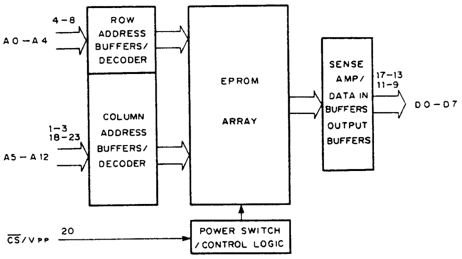
WS57C49B-35T (WSI)

C-MOS 64K (8192x8) BIT HIGH SPEED ERASABLE PROM
– TOP VIEW –


A7 IN 1
A6 IN 2
A5 IN 3
A4 IN 4
A3 IN 5
A2 IN 6
A1 IN 7
A0 IN 8
D0 OUT 9
D1 OUT 10
D2 OUT 11
12 GND
VDD (+5V) 24
23 A8 IN
22 A9 IN
21 A10 IN
20 CS / VPP IN
19 A11 IN
18 A12 IN
17 D7 OUT
16 D6 OUT
15 D5 OUT
14 D4 OUT
13 D3 OUT

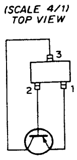

A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
CS
20
D0
D1
D2
D3
D4
D5
D6
D7

A0-A12 ; ADDRESS INPUTS
D0-D7 ; DATA OUTPUTS
$\overline{\text{CS}}$; CHIP SELECT INPUT
Vpp ; PROGRAM POWER SUPPLY

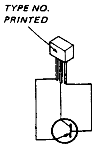

4-8
A0-A4
ROW ADDRESS BUFFERS/ DECODER
1-3
18-23
A5-A12
COLUMN ADDRESS BUFFERS/ DECODER
EPROM ARRAY
SENSE AMP/ DATA IN BUFFERS OUTPUT BUFFERS
17-13
11-9
D0-D7
CS/VPP
20
POWER SWITCH /CONTROL LOGIC

TRANSISTOR, DIODE

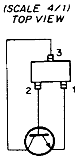
TRANSISTOR


(SCALE 4/1)
TOP VIEW
3
2
1

2SA1462
2SA812

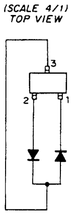

TYPE NO.
PRINTED

2SB810


(SCALE 4/1)
TOP VIEW
3
2
1

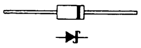
2SC2757
2SC3053
2SC3356

DIODE


(SCALE 4/1)
TOP VIEW
3
2
1

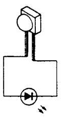
1SS226

DA001-03



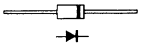
ERB81-004

LR053-01



LN25RP ; RED
LN35BP ; GREEN

DA001-01



S3S4M

SECTION 9
SCHEMATIC DIAGRAMS

The circuit informations are provided below

Circuit Board	Circuit Function
CPU-57	CPU BOARD
SG-153	SYNC GENERATOR BOARD
WKG-5	ENHANCED WIPE BOARD
WKG-4	BASIC WIPE BOARD
KPC-1	KEY PROCESSOR BOARD
MIX-4	MIXER BOARD
MIX-6	DSK (DOWNSTREAM KEYER) BOARD
OUT-1	OUTPUT PROCESSOR BOARD
MAT-1	MATTE GENERATOR BOARD
XPT-1	DIGITAL INPUT BOARD
CN-310	CONTROL CONNECTOR BOARD
CN-311	OUTPUT CONNECTOR BOARD
CN-312 (A)	PRIMARY INPUT CONNECTOR BOARD
CN-312 (B)	PRIMARY INPUT CONNECTOR BOARD
CN-456	POWER SUPPLY CONNECTOR BOARD
CN-503	CHROMA KEY INPUT CONNECTOR BOARD
MB-245	MOTHER BOARD
LE-76	POWER LED BOARD
EX-209	EXTENSION BOARD

回路図内において，REF. NO の近傍に下記記号が記載されてますが，これは生産時の部品データです。

In the schematic diagrams, the following marks are described nearby reference number.
These are parts data at factory.

CAPACITOR (C)

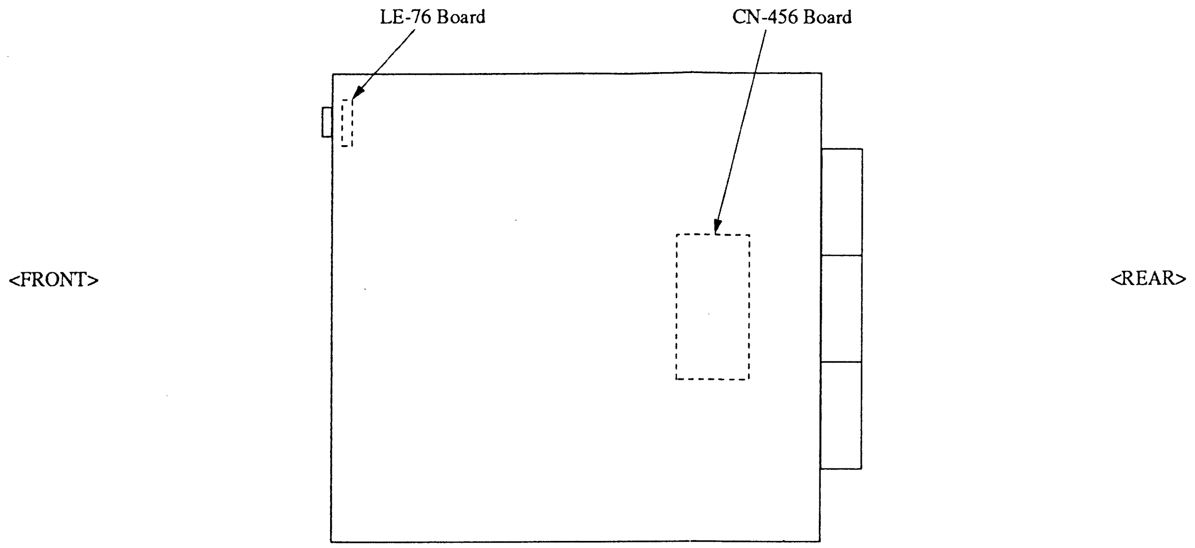
AL AS	ELECTROLYTIC
TA	TANTALUM
CA CC CCS CM CS	CERAMIC
MPS PP PS PT	MYLAR
MD	DIPPED MICA
MS	MICA

RESISTOR (R)
VARIABLE RESISTOR (RV)

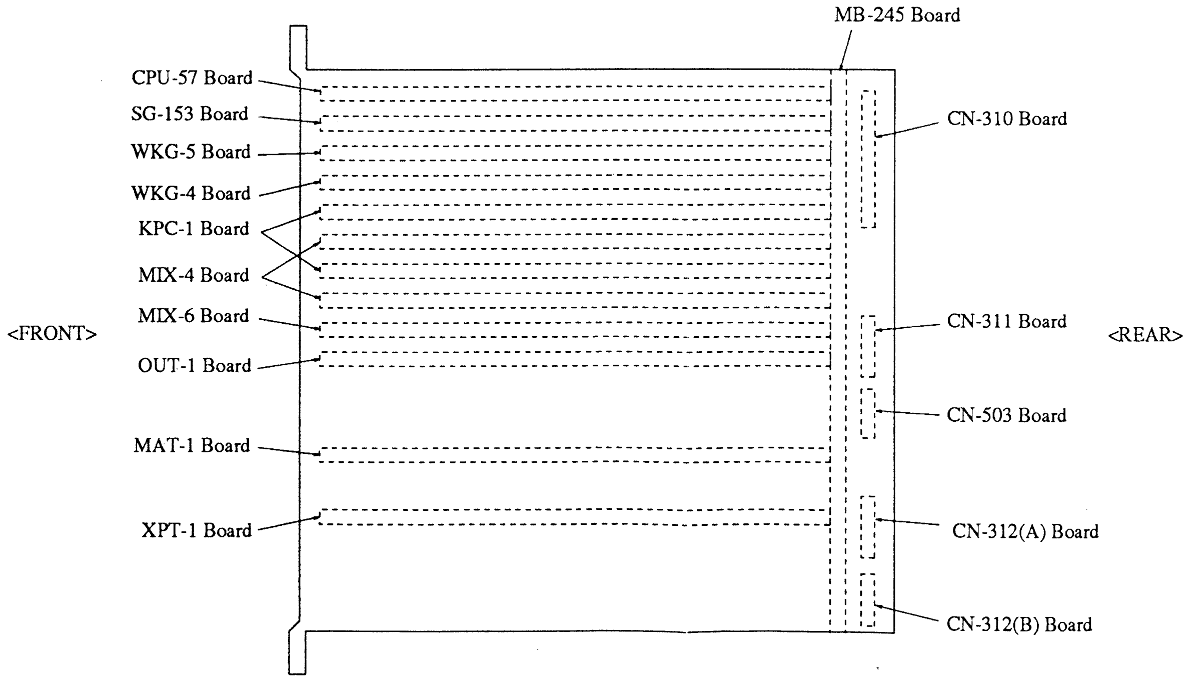
RC RD	CARBON
RF	FUSE
RN RS	METAL
RW	WIERWOUND

Location of the Printed Circuit Boards

<Power Unit: Top View>

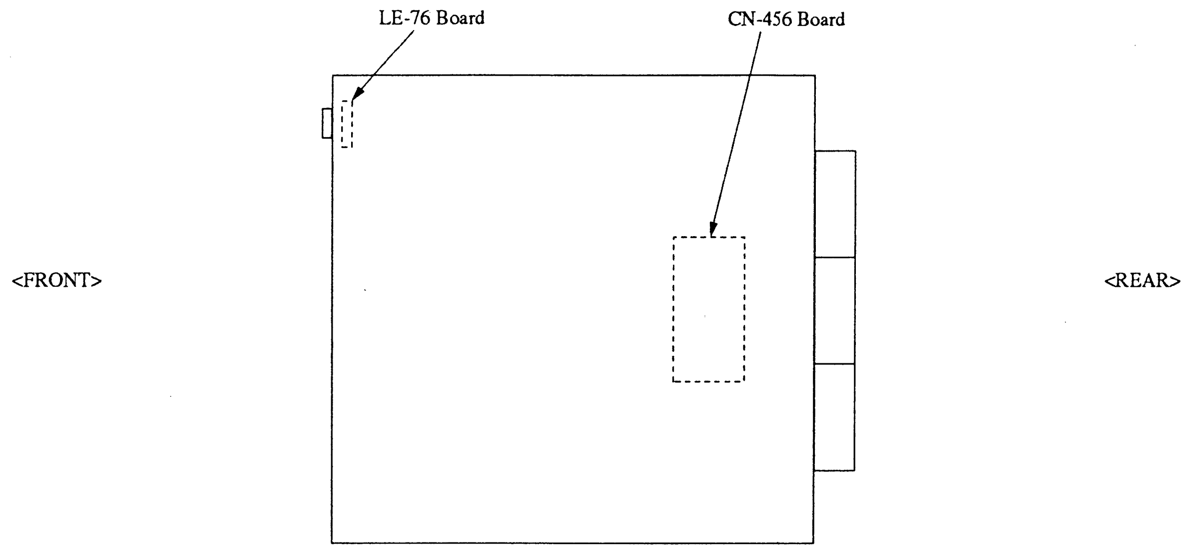

LE-76 Board
CN-456 Board
<FRONT>
<REAR>

<Main Unit Chassis: Top View>

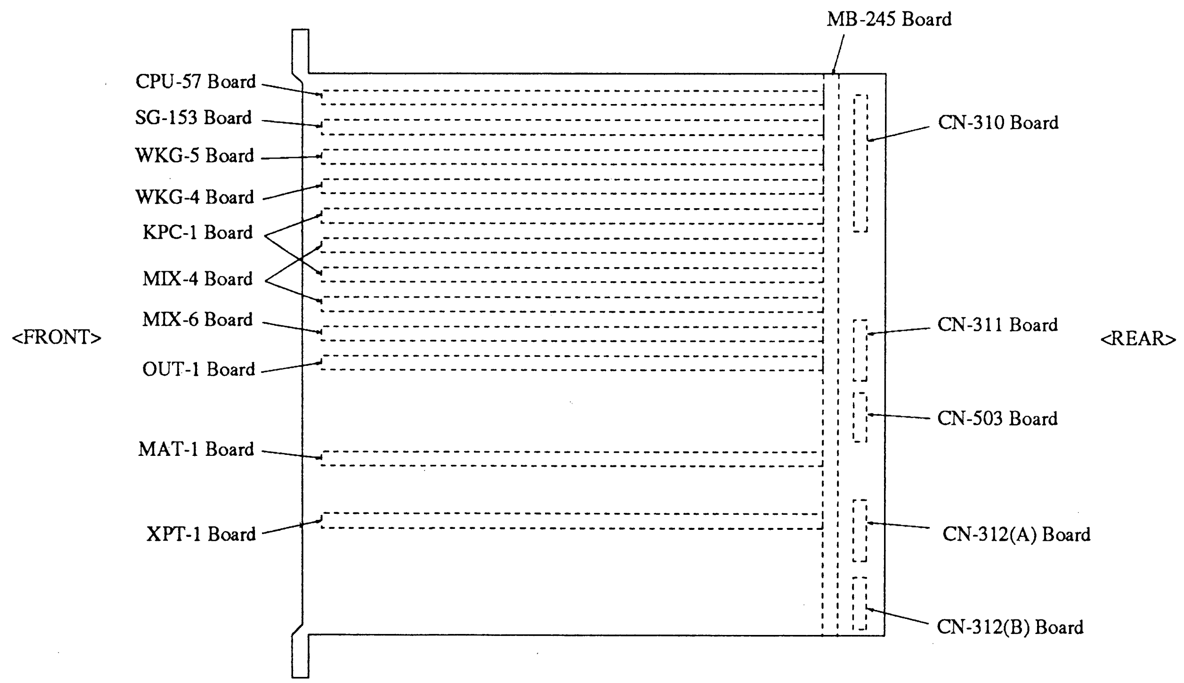

MB-245 Board
CPU-57 Board
SG-153 Board
WKG-5 Board
WKG-4 Board
KPC-1 Board
MIX-4 Board
MIX-6 Board
OUT-1 Board
MAT-1 Board
XPT-1 Board
<FRONT>
CN-310 Board
CN-311 Board
<REAR>
CN-503 Board
CN-312(A) Board
CN-312(B) Board

Location of the Printed Circuit Boards

<Power Unit: Top View>

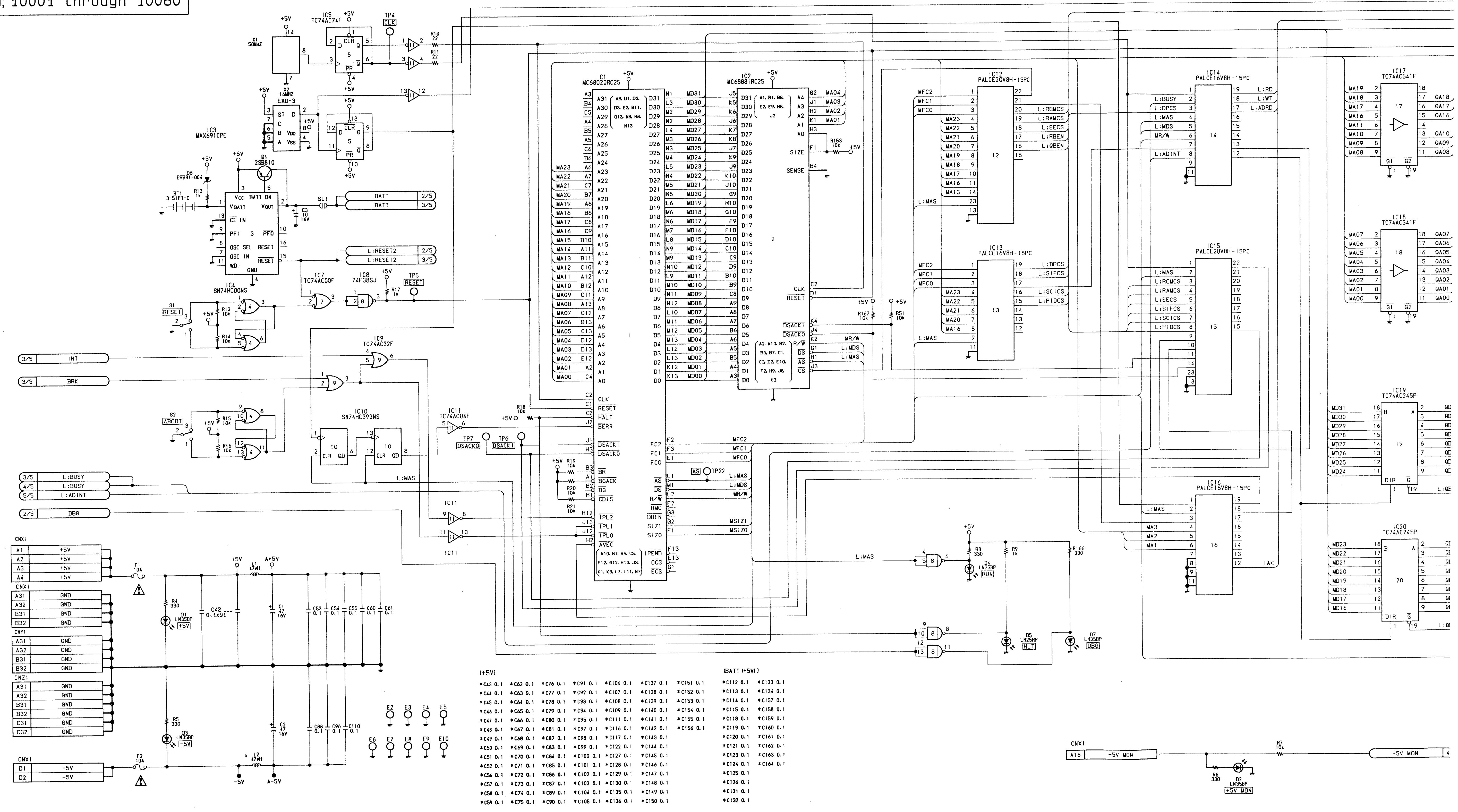

LE-76 Board
CN-456 Board
<FRONT>
<REAR>

<Main Unit Chassis: Top View>


MB-245 Board
CPU-57 Board
SG-153 Board
WKG-5 Board
WKG-4 Board
KPC-1 Board
MIX-4 Board
MIX-6 Board
OUT-1 Board
MAT-1 Board
XPT-1 Board
CN-310 Board
CN-311 Board
CN-503 Board
CN-312(A) Board
CN-312(B) Board
<FRONT>
<REAR>

CPU-57 (1/5) CPU BOARD

S/N; 10001 through 10060


X1 50MHZ
IC5 TC74AC74F
TP4 CLK
R10 22
R11 22
X2 16MHZ EXO-3
IC3 MAX691CPE
D6 ERB81-004
Q1 2SB810
BT1 3-S1F1-C
R12 1k
C3 10 16V
SL1
BATT 2/5
BATT 3/5
L:RESET2 2/5
L:RESET2 3/5
IC7 TC74AC00F
IC8 74F38SJ
R17 1k
TP5 RESET
IC4 SN74HC00NS
S1 RESET
R13 10k
R14 10k
IC9 TC74AC32F
3/5 INT
3/5 BRK
S2 ABORT
R15 10k
R16 10k
IC10 SN74HC393NS
IC11 TC74AC04F
TP7 DSACK0
TP6 DSACK1
3/5 L:BUSY
4/5 L:BUSY
5/5 L:ADINT
2/5 DBG
L:MAS
IC1 MC68020RC25
IC2 MC68881RC25
R18 10k
R19 10k
R20 10k
R21 10k
TP22 AS
R153 10k
R167 10k
R51 10k
MR/W
L:MDS
L:MAS
MFC2 MFC1 MFC0
MSIZ1 MSIZ0
IC12 PALCE20V8H-15PC
L:ROMCS L:RAMCS L:EECS L:RBEN L:QBEN
IC13 PALCE16V8H-15PC
L:DPCS L:SIFCS L:SCICS L:PIOCS
IC14 PALCE16V8H-15PC
L:BUSY L:DPCS L:MAS L:MDS MR/W L:ADINT
L:RD L:WT L:ADRD
IC15 PALCE20V8H-15PC
L:MAS L:ROMCS L:RAMCS L:EECS L:SIFCS L:SCICS L:PIOCS
IC16 PALCE16V8H-15PC
L:MAS MA3 MA2 MA1
IAK
IC17 TC74AC541F
IC18 TC74AC541F
IC19 TC74AC245P
IC20 TC74AC245P
R8 330
D4 LN35BP RUN
R9 1k
D5 LN25RP HLT
R166 330
D7 LN35BP DBG
CNX1 A1 +5V A2 +5V A3 +5V A4 +5V
CNX1 A31 GND A32 GND B31 GND B32 GND
CNY1 A31 GND A32 GND B31 GND B32 GND
CNZ1 A31 GND A32 GND B31 GND B32 GND C31 GND C32 GND
CNX1 D1 -5V D2 -5V
F1 10A
F2 10A
R4 330
D1 LN35BP +5V
R5 330
D3 LN35BP -5V
C42 0.1x91
L1 47μH
A+5V
C1 47 16V
C53 0.1 C54 0.1 C55 0.1 C60 0.1 C61 0.1
L2 47μH
-5V A-5V
C2 47 16V
C88 0.1 C96 0.1 C110 0.1
E2 E3 E4 E5 E6 E7 E8 E9 E10
CNX1 A16 +5V MON
R7 10k
R6 330
D2 LN35BP +5V MON
+5V MON

(+5V)

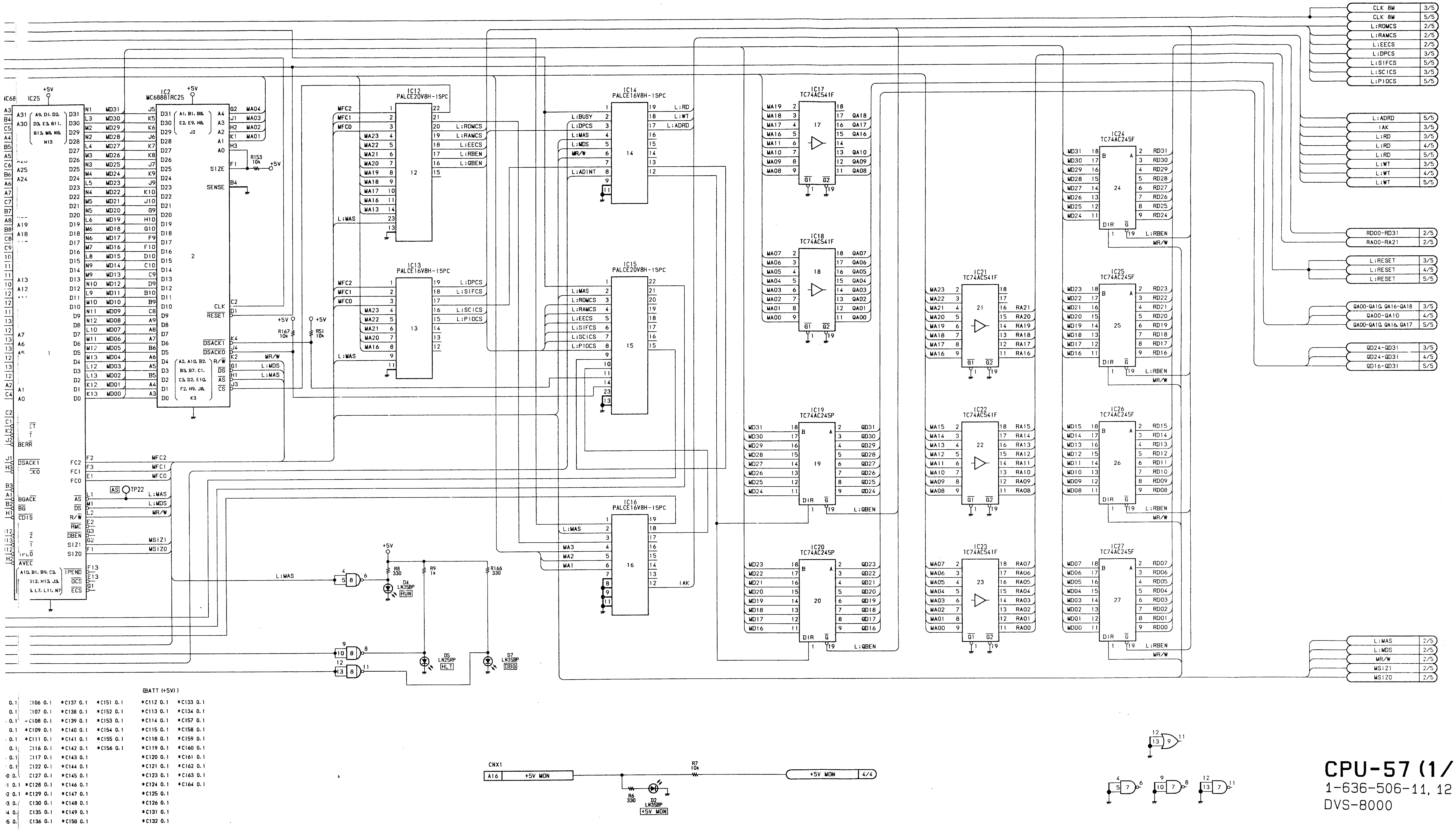
*C43 0.1
*C44 0.1
*C45 0.1
*C46 0.1
*C47 0.1
*C48 0.1
*C49 0.1
*C50 0.1
*C51 0.1
*C52 0.1
*C56 0.1
*C57 0.1
*C58 0.1
*C59 0.1
*C62 0.1
*C63 0.1
*C64 0.1
*C65 0.1
*C66 0.1
*C67 0.1
*C68 0.1
*C69 0.1
*C70 0.1
*C71 0.1
*C72 0.1
*C73 0.1
*C74 0.1
*C75 0.1
*C76 0.1
*C77 0.1
*C78 0.1
*C79 0.1
*C80 0.1
*C81 0.1
*C82 0.1
*C83 0.1
*C84 0.1
*C85 0.1
*C86 0.1
*C87 0.1
*C89 0.1
*C90 0.1
*C91 0.1
*C92 0.1
*C93 0.1
*C94 0.1
*C95 0.1
*C97 0.1
*C98 0.1
*C99 0.1
*C100 0.1
*C101 0.1
*C102 0.1
*C103 0.1
*C104 0.1
*C105 0.1
*C106 0.1
*C107 0.1
*C108 0.1
*C109 0.1
*C111 0.1
*C116 0.1
*C117 0.1
*C122 0.1
*C127 0.1
*C128 0.1
*C129 0.1
*C130 0.1
*C135 0.1
*C136 0.1
*C137 0.1
*C138 0.1
*C139 0.1
*C140 0.1
*C141 0.1
*C142 0.1
*C143 0.1
*C144 0.1
*C145 0.1
*C146 0.1
*C147 0.1
*C148 0.1
*C149 0.1
*C150 0.1
*C151 0.1
*C152 0.1
*C153 0.1
*C154 0.1
*C155 0.1
*C156 0.1

(BATT (+5V))

*C112 0.1
*C113 0.1
*C114 0.1
*C115 0.1
*C118 0.1
*C119 0.1
*C120 0.1
*C121 0.1
*C123 0.1
*C124 0.1
*C125 0.1
*C126 0.1
*C131 0.1
*C132 0.1
*C133 0.1
*C134 0.1
*C157 0.1
*C158 0.1
*C159 0.1
*C160 0.1
*C161 0.1
*C162 0.1
*C163 0.1
*C164 0.1

B-SYX121-CPU57#1

A B C D E F G H


IC25
IC2
MC68881RC25
IC12
PALCE20V8H-15PC
IC13
PALCE16V8H-15PC
IC14
PALCE16V8H-15PC
IC15
PALCE20V8H-15PC
IC16
PALCE16V8H-15PC
IC17
TC74AC541F
IC18
TC74AC541F
IC19
TC74AC245P
IC20
TC74AC245P
IC21
TC74AC541F
IC22
TC74AC541F
IC23
TC74AC541F
IC24
TC74AC245F
IC25
TC74AC245F
IC26
TC74AC245F
IC27
TC74AC245F
+5V
R153 10k
R167 10k
R51 10k
R8 330
R9 1k
R166 330
D4 LN35BP RUN
D5 LN25RP HLT
D7 LN35BP DBG
TP22
CNX1
A16
+5V MON
R7 10k
R6 330
D2 LN35BP +5V MON
CLK 8M 3/5
CLK 8M 5/5
L:ROMCS 2/5
L:RAMCS 2/5
L:EECS 2/5
L:DPCS 3/5
L:SIFCS 5/5
L:SCICS 3/5
L:PIOCS 5/5
L:ADRD 5/5
IAK 3/5
L:RD 3/5
L:RD 4/5
L:RD 5/5
L:WT 3/5
L:WT 4/5
L:WT 5/5
RD00-RD31 2/5
RA00-RA21 2/5
L:RESET 3/5
L:RESET 4/5
L:RESET 5/5
QA00-QA10, QA16-QA18 3/5
QA00-QA10 4/5
QA00-QA10, QA16, QA17 5/5
QD24-QD31 3/5
QD24-QD31 4/5
QD16-QD31 5/5
L:MAS 2/5
L:MDS 2/5
MR/W 2/5
MSIZ1 2/5
MSIZ0 2/5
+5V MON 4/4
(BATT (+5V))
0.1 C106 0.1 *C137 0.1 *C151 0.1 *C112 0.1 *C133 0.1
0.1 C107 0.1 *C138 0.1 *C152 0.1 *C113 0.1 *C134 0.1
0.1 C108 0.1 *C139 0.1 *C153 0.1 *C114 0.1 *C157 0.1
0.1 *C109 0.1 *C140 0.1 *C154 0.1 *C115 0.1 *C158 0.1
0.1 *C111 0.1 *C141 0.1 *C155 0.1 *C118 0.1 *C159 0.1
0.1 C116 0.1 *C142 0.1 *C156 0.1 *C119 0.1 *C160 0.1
0.1 C117 0.1 *C143 0.1 *C120 0.1 *C161 0.1
0.1 C122 0.1 *C144 0.1 *C121 0.1 *C162 0.1
0 0.1 C127 0.1 *C145 0.1 *C123 0.1 *C163 0.1
1 0.1 *C128 0.1 *C146 0.1 *C124 0.1 *C164 0.1
2 0.1 *C129 0.1 *C147 0.1 *C125 0.1
3 0.1 C130 0.1 *C148 0.1 *C126 0.1
4 0. C135 0.1 *C149 0.1 *C131 0.1
5 0. C136 0.1 *C150 0.1 *C132 0.1

CPU-57 (1/5)

1-636-506-11, 12

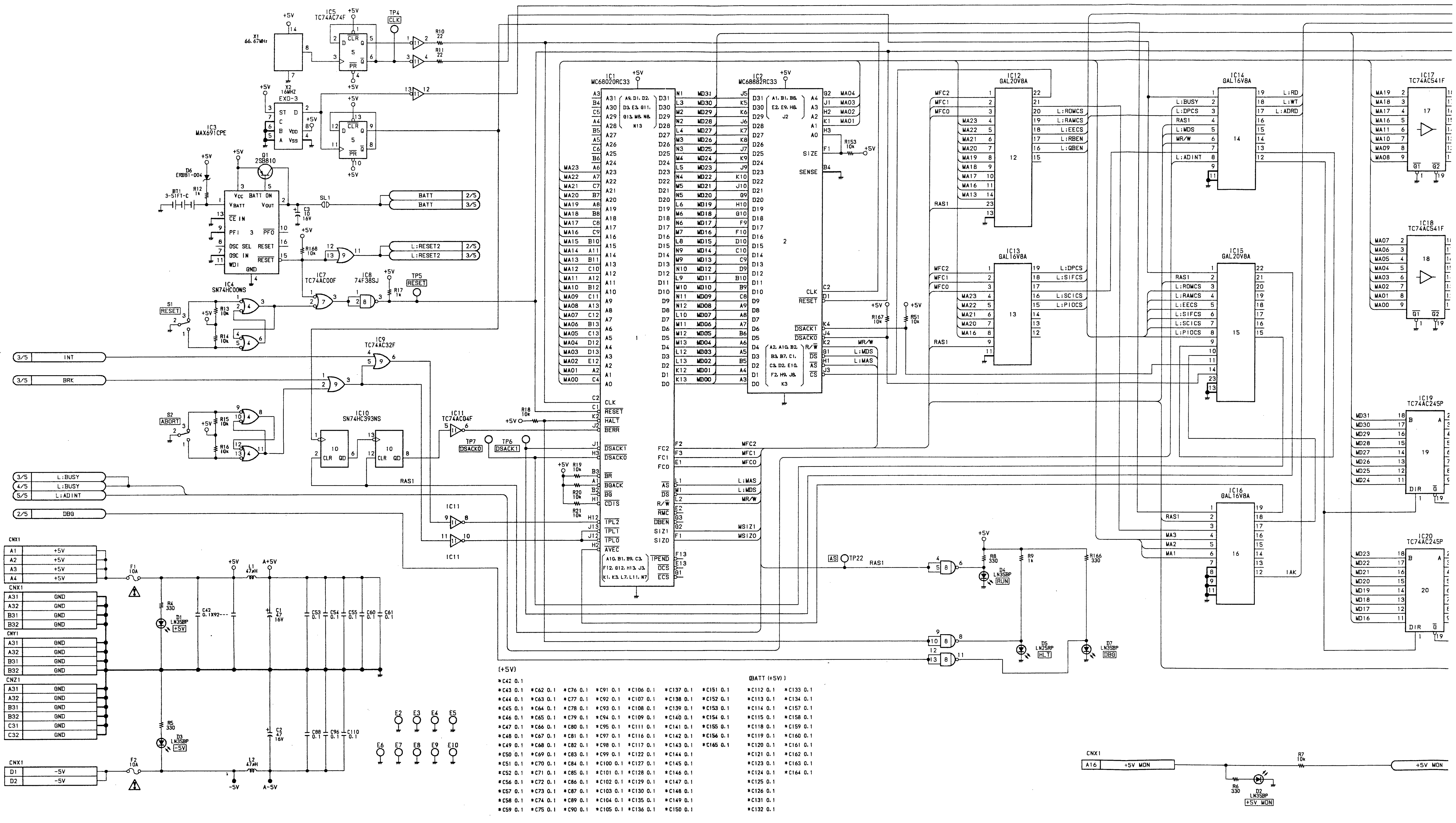
DVS-8000

9-5 (a) 9-6 (a)

F F G H I J K L

CPU-57 CPU BOARD

S/N; 10061 and higher


1
2
3
4
5
X1 66.67MHz
IC5 TC74AC74F
TP4 CLK
R10 22
R11 22
X2 16MHZ EXO-3
IC3 MAX691CPE
Q1 2SB810
D6 ERB81-004
BT1 3-S1F1-C
R12 1k
C3 10 16V
SL1
BATT 2/5
BATT 3/5
R168 10k
L:RESET2 2/5
L:RESET2 3/5
IC4 SN74HC00NS
IC7 TC74AC00F
IC8 74F38SJ
R17 1k
TP5 RESET
S1 RESET
R13 10k
R14 10k
3/5 INT
3/5 BRK
IC9 TC74AC32F
S2 ABORT
R15 10k
R16 10k
IC10 SN74HC393NS
IC11 TC74AC04F
R18 10k
TP7 DSACK0
TP6 DSACK1
RAS1
3/5 L:BUSY
4/5 L:BUSY
5/5 L:ADINT
2/5 DBG
IC11
IC1 MC68020RC33
IC2 MC68882RC33
R19 10k
R20 10k
R21 10k
R153 10k
R167 10k
R51 10k
IC12 GAL20V8A
IC13 GAL16V8A
IC14 GAL16V8A
IC15 GAL20V8A
IC16 GAL16V8A
IC17 TC74AC541F
IC18 TC74AC541F
IC19 TC74AC245P
IC20 TC74AC245P
L:ROMCS
L:RAMCS
L:EECS
L:RBEN
L:QBEN
L:DPCS
L:SIFCS
L:SCICS
L:PIOCS
L:RD
L:WT
L:ADRD
IAK
MR/W
L:MDS
L:MAS
MSIZ1
MSIZ0
MFC2
MFC1
MFC0
AS TP22
R8 330
D4 LN35BP RUN
R9 1k
R166 330
D5 LN25RP HLT
D7 LN35BP DBG
CNX1
A1 +5V
A2 +5V
A3 +5V
A4 +5V
A31 GND
A32 GND
B31 GND
B32 GND
CNY1
CNZ1
C31 GND
C32 GND
D1 -5V
D2 -5V
F1 10A
F2 10A
R4 330
D1 LN35BP +5V
C42 0.1X92
L1 47μH
A+5V
C1 47 16V
C53 0.1
C54 0.1
C55 0.1
C60 0.1
C61 0.1
R5 330
D3 LN35BP -5V
C2 47 16V
C88 0.1
C96 0.1
C110 0.1
L2 47μH
-5V
A-5V
E2 E3 E4 E5
E6 E7 E8 E9 E10
A16 +5V MON
R7 10k
R6 330
D2 LN35BP +5V MON
+5V MON

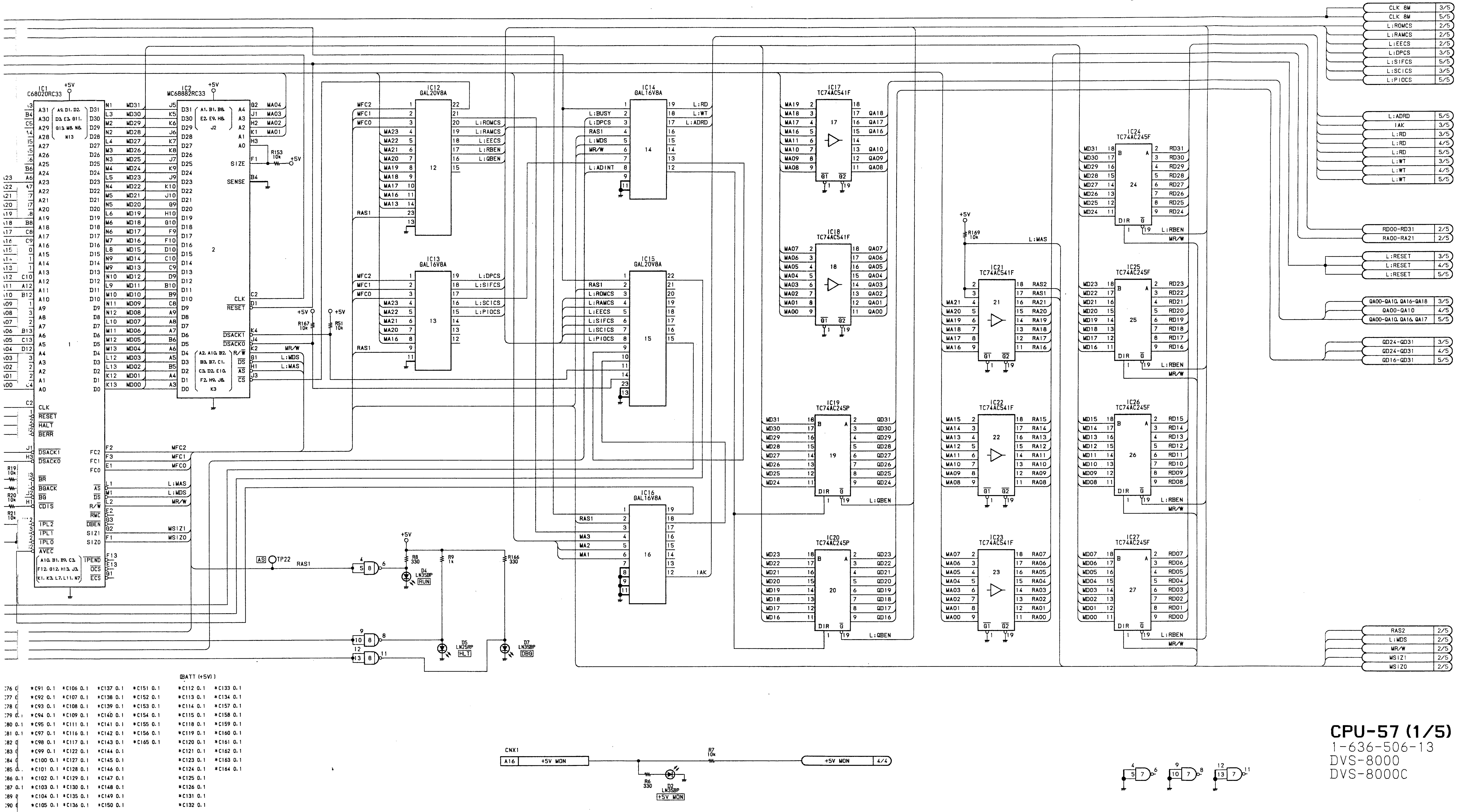
(+5V)

*C42 0.1
*C43 0.1
*C44 0.1
*C45 0.1
*C46 0.1
*C47 0.1
*C48 0.1
*C49 0.1
*C50 0.1
*C51 0.1
*C52 0.1
*C56 0.1
*C57 0.1
*C58 0.1
*C59 0.1
*C62 0.1
*C63 0.1
*C64 0.1
*C65 0.1
*C66 0.1
*C67 0.1
*C68 0.1
*C69 0.1
*C70 0.1
*C71 0.1
*C72 0.1
*C73 0.1
*C74 0.1
*C75 0.1
*C76 0.1
*C77 0.1
*C78 0.1
*C79 0.1
*C80 0.1
*C81 0.1
*C82 0.1
*C83 0.1
*C84 0.1
*C85 0.1
*C86 0.1
*C87 0.1
*C89 0.1
*C90 0.1
*C91 0.1
*C92 0.1
*C93 0.1
*C94 0.1
*C95 0.1
*C97 0.1
*C98 0.1
*C99 0.1
*C100 0.1
*C101 0.1
*C102 0.1
*C103 0.1
*C104 0.1
*C105 0.1
*C106 0.1
*C107 0.1
*C108 0.1
*C109 0.1
*C111 0.1
*C116 0.1
*C117 0.1
*C122 0.1
*C127 0.1
*C128 0.1
*C129 0.1
*C130 0.1
*C135 0.1
*C136 0.1
*C137 0.1
*C138 0.1
*C139 0.1
*C140 0.1
*C141 0.1
*C142 0.1
*C143 0.1
*C144 0.1
*C145 0.1
*C146 0.1
*C147 0.1
*C148 0.1
*C149 0.1
*C150 0.1
*C151 0.1
*C152 0.1
*C153 0.1
*C154 0.1
*C155 0.1
*C156 0.1
*C165 0.1

(BATT (+5V))

*C112 0.1
*C113 0.1
*C114 0.1
*C115 0.1
*C118 0.1
*C119 0.1
*C120 0.1
*C121 0.1
*C123 0.1
*C124 0.1
*C125 0.1
*C126 0.1
*C131 0.1
*C132 0.1
*C133 0.1
*C134 0.1
*C157 0.1
*C158 0.1
*C159 0.1
*C160 0.1
*C161 0.1
*C162 0.1
*C163 0.1
*C164 0.1

A | B | C | D | E | F | G | H

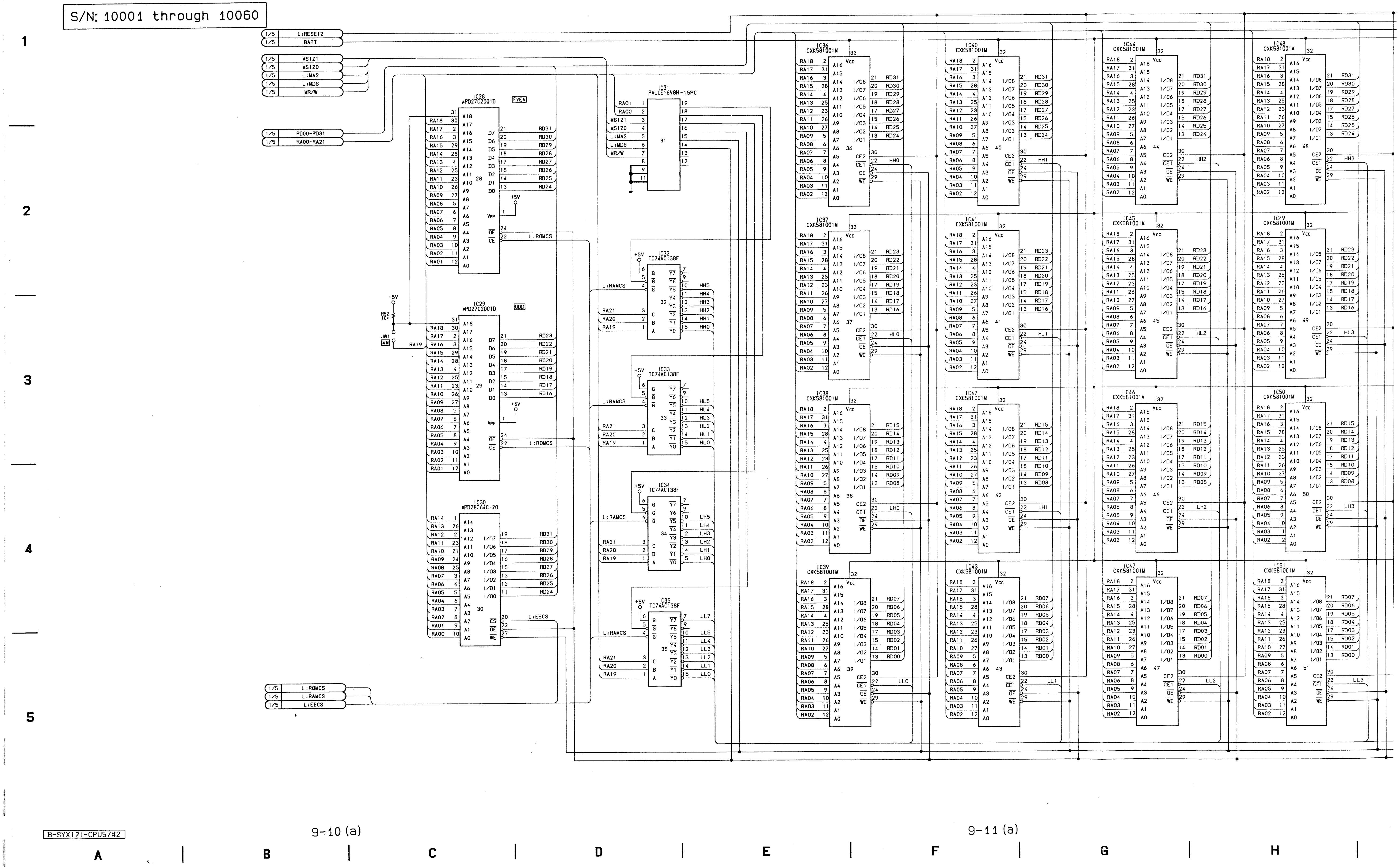

IC1 C68020RC33
IC2 MC68882RC33
IC12 GAL20V8A
IC13 GAL16V8A
IC14 GAL16V8A
IC15 GAL20V8A
IC16 GAL16V8A
IC17 TC74AC541F
IC18 TC74AC541F
IC19 TC74AC245P
IC20 TC74AC245P
IC21 TC74AC541F
IC22 TC74AC541F
IC23 TC74AC541F
IC24 TC74AC245F
IC25 TC74AC245F
IC26 TC74AC245F
IC27 TC74AC245F
CLK 8M 3/5
CLK 8M 5/5
L:ROMCS 2/5
L:RAMCS 2/5
L:EECS 2/5
L:DPCS 3/5
L:SIFCS 5/5
L:SCICS 3/5
L:PIOCS 5/5
L:ADRD 5/5
IAK 3/5
L:RD 3/5
L:RD 4/5
L:RD 5/5
L:WT 3/5
L:WT 4/5
L:WT 5/5
RD00-RD31 2/5
RA00-RA21 2/5
L:RESET 3/5
L:RESET 4/5
L:RESET 5/5
QA00-QA10, QA16-QA18 3/5
QA00-QA10 4/5
QA00-QA10, QA16, QA17 5/5
QD24-QD31 3/5
QD24-QD31 4/5
QD16-QD31 5/5
RAS2 2/5
L:MDS 2/5
MR/W 2/5
MSIZ1 2/5
MSIZ0 2/5
TP22
D4 LN35BP RUN
D5 LN25RP HLT
D7 LN35BP DBG
D2 LN35BP +5V MON
CNX1 A16 +5V MON
R7 10k
+5V MON 4/4

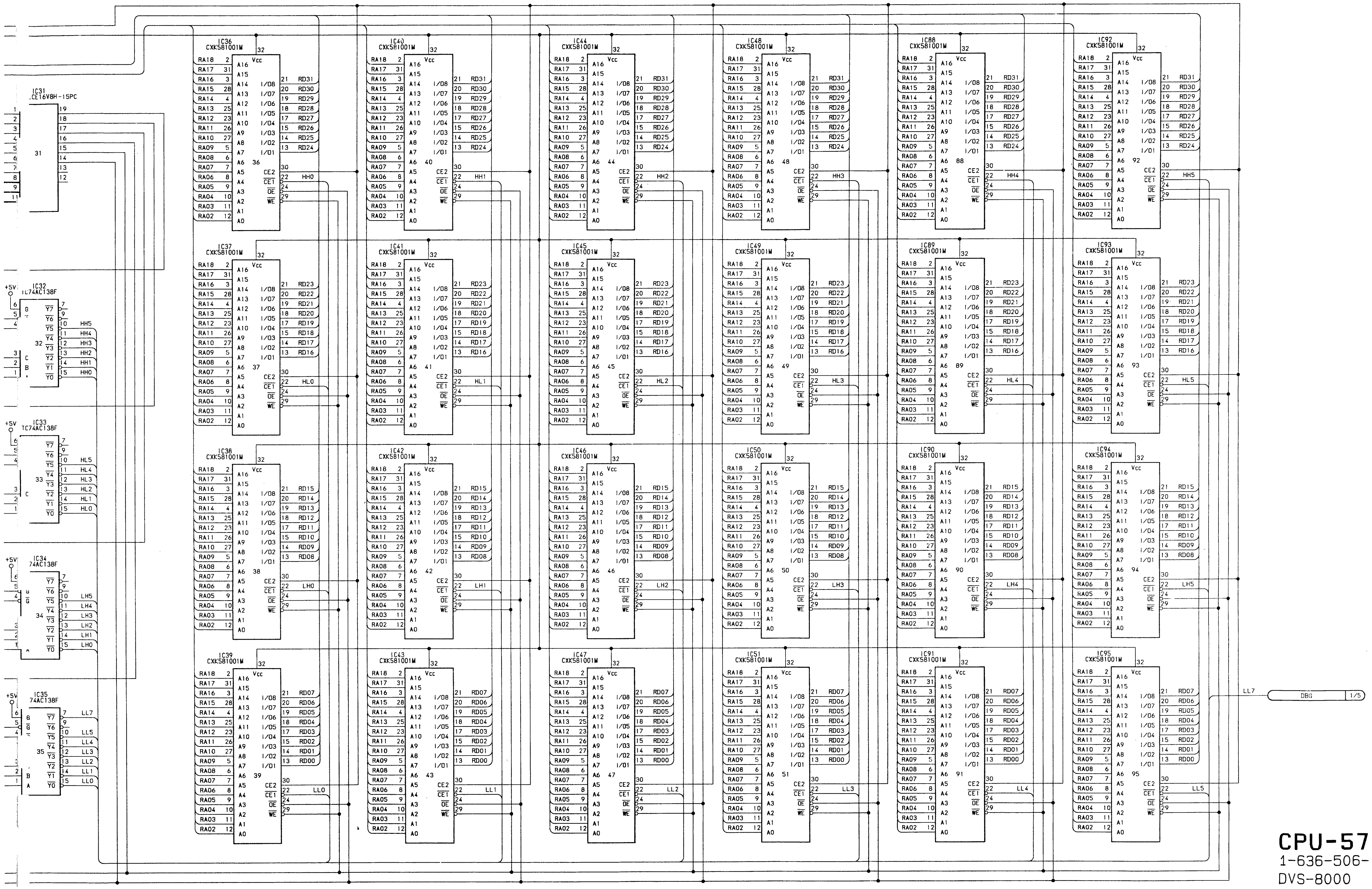
CPU-57 (1/5)
1-636-506-13
DVS-8000
DVS-8000C

9-5 (b) 9-6 (b)

CPU-57 (2/5) CPU BOARD

S/N: 10001 through 10060


1
2
3
4
5
A
B
C
D
E
F
G
H
1/5
L:RESET2
BATT
MSIZ1
MSIZ0
L:MAS
L:MDS
MR/W
RD00-RD31
RA00-RA21
L:ROMCS
L:RAMCS
L:EECS
IC28 μPD27C2001D EVEN
IC29 μPD27C2001D ODD
IC30 μPD28C64C-20
IC31 PALCE16V8H-15PC
IC32 TC74AC138F
IC33 TC74AC138F
IC34 TC74AC138F
IC35 TC74AC138F
IC36 CXK581001M
IC37 CXK581001M
IC38 CXK581001M
IC39 CXK581001M
IC40 CXK581001M
IC41 CXK581001M
IC42 CXK581001M
IC43 CXK581001M
IC44 CXK581001M
IC45 CXK581001M
IC46 CXK581001M
IC47 CXK581001M
IC48 CXK581001M
IC49 CXK581001M
IC50 CXK581001M
IC51 CXK581001M
+5V
R52 10k
JW1 4M
HH0 HH1 HH2 HH3 HH4 HH5
HL0 HL1 HL2 HL3 HL4 HL5
LH0 LH1 LH2 LH3 LH4 LH5
LL0 LL1 LL2 LL3 LL4 LL5 LL7


IC31
LCE16V8H-15PC
IC32
TC74AC138F
IC33
TC74AC138F
IC34
74AC138F
IC35
74AC138F
+5V
IC36
CXK581001M
IC37
CXK581001M
IC38
CXK581001M
IC39
CXK581001M
IC40
CXK581001M
IC41
CXK581001M
IC42
CXK581001M
IC43
CXK581001M
IC44
CXK581001M
IC45
CXK581001M
IC46
CXK581001M
IC47
CXK581001M
IC48
CXK581001M
IC49
CXK581001M
IC50
CXK581001M
IC51
CXK581001M
IC88
CXK581001M
IC89
CXK581001M
IC90
CXK581001M
IC91
CXK581001M
IC92
CXK581001M
IC93
CXK581001M
IC94
CXK581001M
IC95
CXK581001M
RA18
RA17
RA16
RA15
RA14
RA13
RA12
RA11
RA10
RA09
RA08
RA07
RA06
RA05
RA04
RA03
RA02
RD31
RD30
RD29
RD28
RD27
RD26
RD25
RD24
RD23
RD22
RD21
RD20
RD19
RD18
RD17
RD16
RD15
RD14
RD13
RD12
RD11
RD10
RD09
RD08
RD07
RD06
RD05
RD04
RD03
RD02
RD01
RD00
HH0
HH1
HH2
HH3
HH4
HH5
HL0
HL1
HL2
HL3
HL4
HL5
LH0
LH1
LH2
LH3
LH4
LH5
LL0
LL1
LL2
LL3
LL4
LL5
LL7
DBG
1/5

CPU-57 (2/5)
1-636-506-11, 12
DVS-8000

CPU-57 CPU BOARD S/N; 10061 and higher

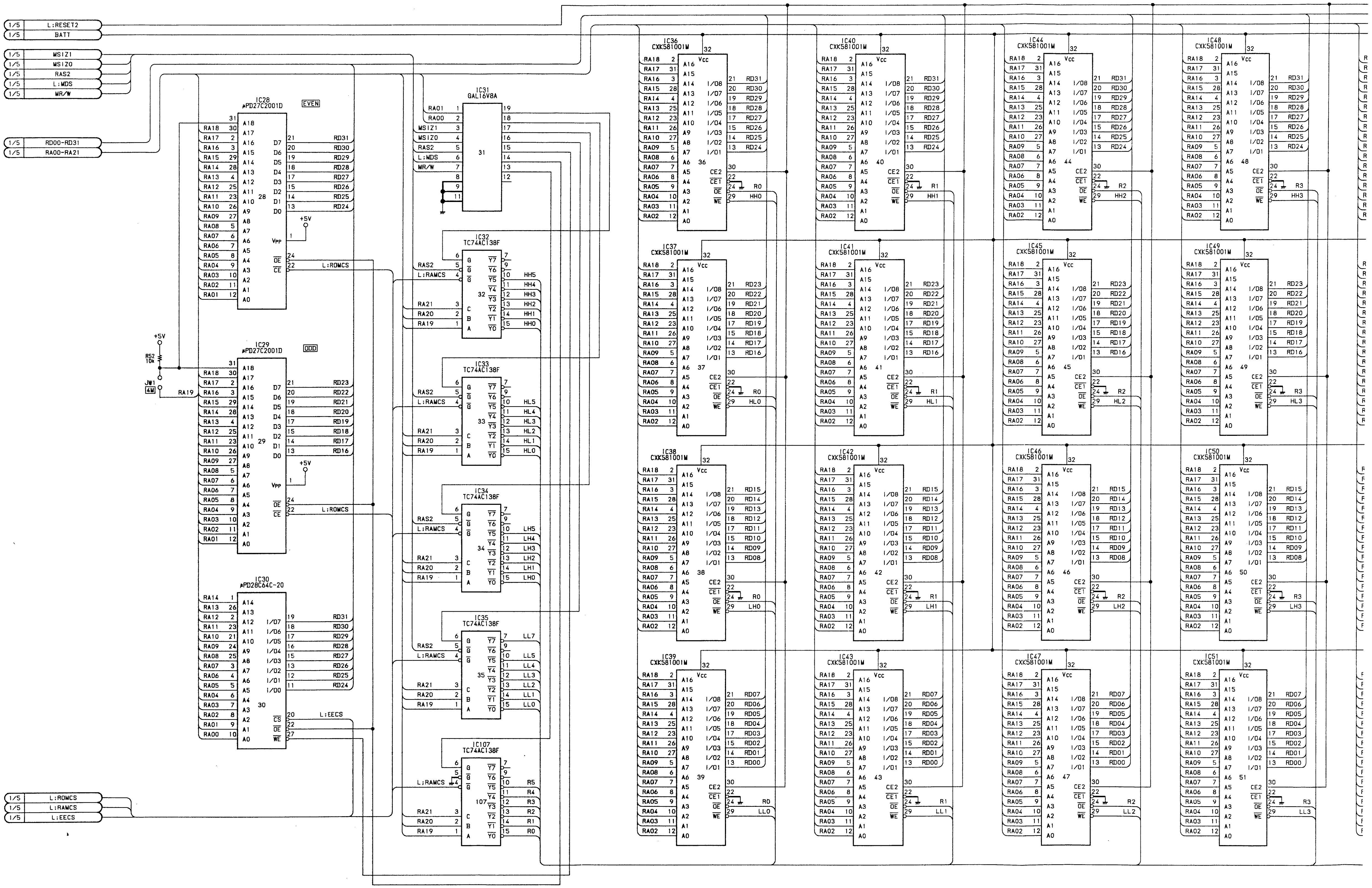
1

2

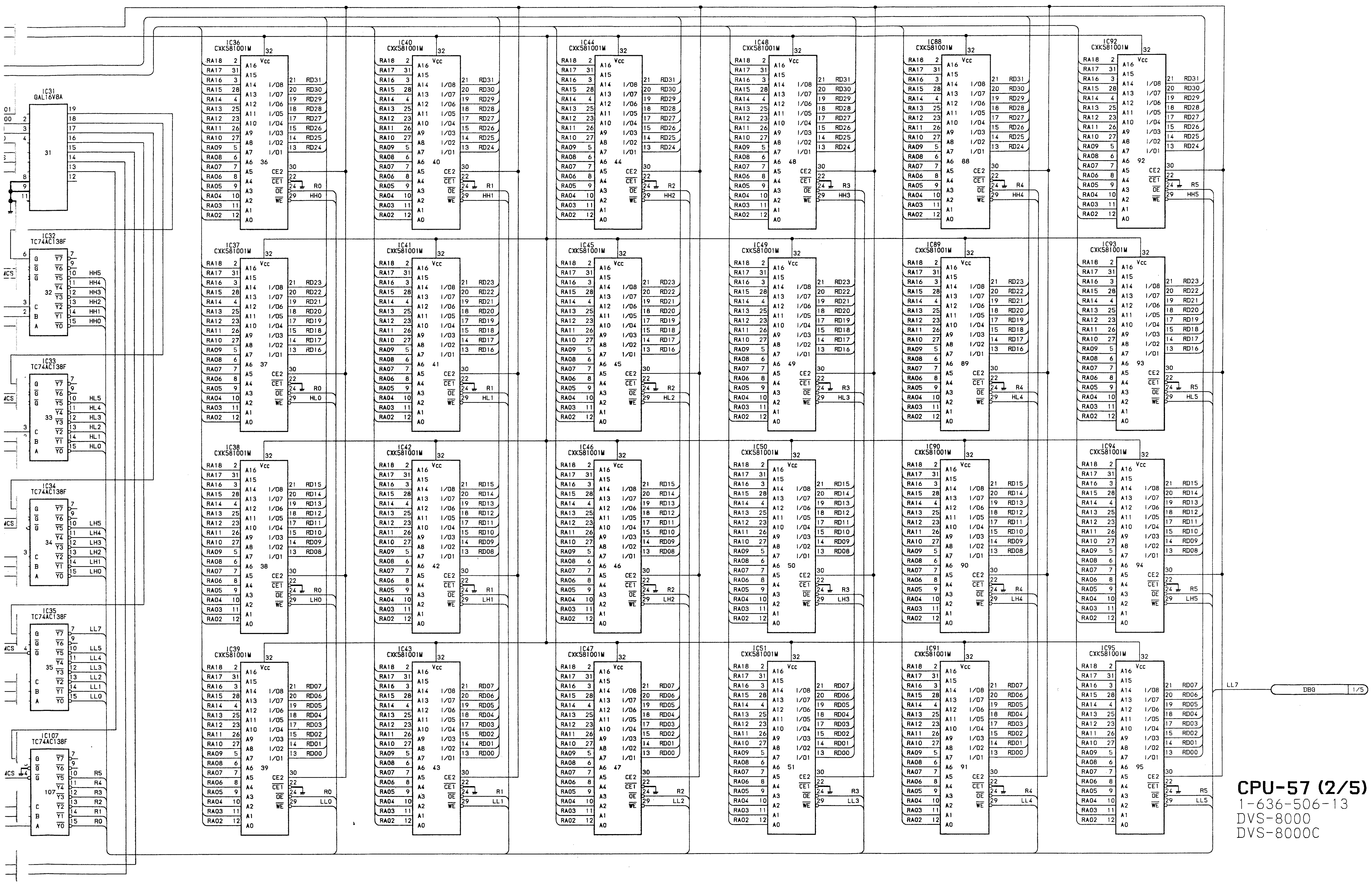
3

4

5


1/5 L:RESET2
1/5 BATT
1/5 MSIZ1
1/5 MSIZ0
1/5 RAS2
1/5 L:MDS
1/5 MR/W
1/5 RD00-RD31
1/5 RA00-RA21
IC28 μPD27C2001D
EVEN
IC29 μPD27C2001D
ODD
IC30 μPD28C64C-20
IC31 GAL16V8A
IC32 TC74AC138F
IC33 TC74AC138F
IC34 TC74AC138F
IC35 TC74AC138F
IC107 TC74AC138F
IC36 CXK581001M
IC37 CXK581001M
IC38 CXK581001M
IC39 CXK581001M
IC40 CXK581001M
IC41 CXK581001M
IC42 CXK581001M
IC43 CXK581001M
IC44 CXK581001M
IC45 CXK581001M
IC46 CXK581001M
IC47 CXK581001M
IC48 CXK581001M
IC49 CXK581001M
IC50 CXK581001M
IC51 CXK581001M
+5V
RS2 10k
JW1 4M
RA19
L:ROMCS
L:RAMCS
L:EECS
HH0 HH1 HH2 HH3 HH4 HH5
HL0 HL1 HL2 HL3 HL4 HL5
LH0 LH1 LH2 LH3 LH4 LH5
LL0 LL1 LL2 LL3 LL4 LL5 LL7
R0 R1 R2 R3 R4 R5
1/5 L:ROMCS
1/5 L:RAMCS
1/5 L:EECS

A | B | C | D | E | F | G | H


IC31
GAL16V8A
IC32
TC74AC138F
IC33
TC74AC138F
IC34
TC74AC138F
IC35
TC74AC138F
IC107
TC74AC138F
IC36
CXK581001M
IC37
CXK581001M
IC38
CXK581001M
IC39
CXK581001M
IC40
CXK581001M
IC41
CXK581001M
IC42
CXK581001M
IC43
CXK581001M
IC44
CXK581001M
IC45
CXK581001M
IC46
CXK581001M
IC47
CXK581001M
IC48
CXK581001M
IC49
CXK581001M
IC50
CXK581001M
IC51
CXK581001M
IC88
CXK581001M
IC89
CXK581001M
IC90
CXK581001M
IC91
CXK581001M
IC92
CXK581001M
IC93
CXK581001M
IC94
CXK581001M
IC95
CXK581001M
LL7
DBG
1/5

CPU-57 (2/5)
1-636-506-13
DVS-8000
DVS-8000C

9-11 (b)

9-12 (b)

E F G H I J K L

CPU-57 (3/5) CPU BOARD

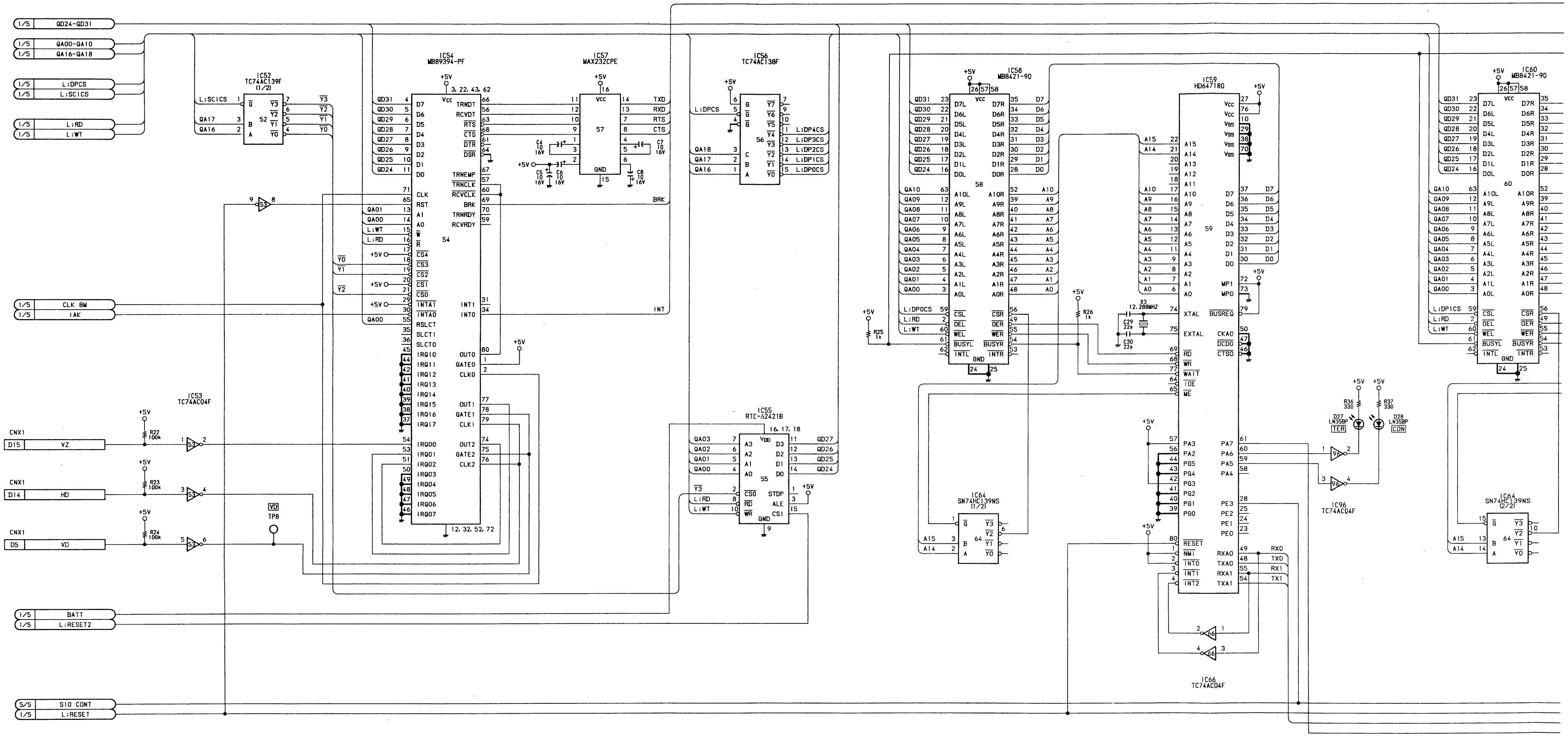
1

2

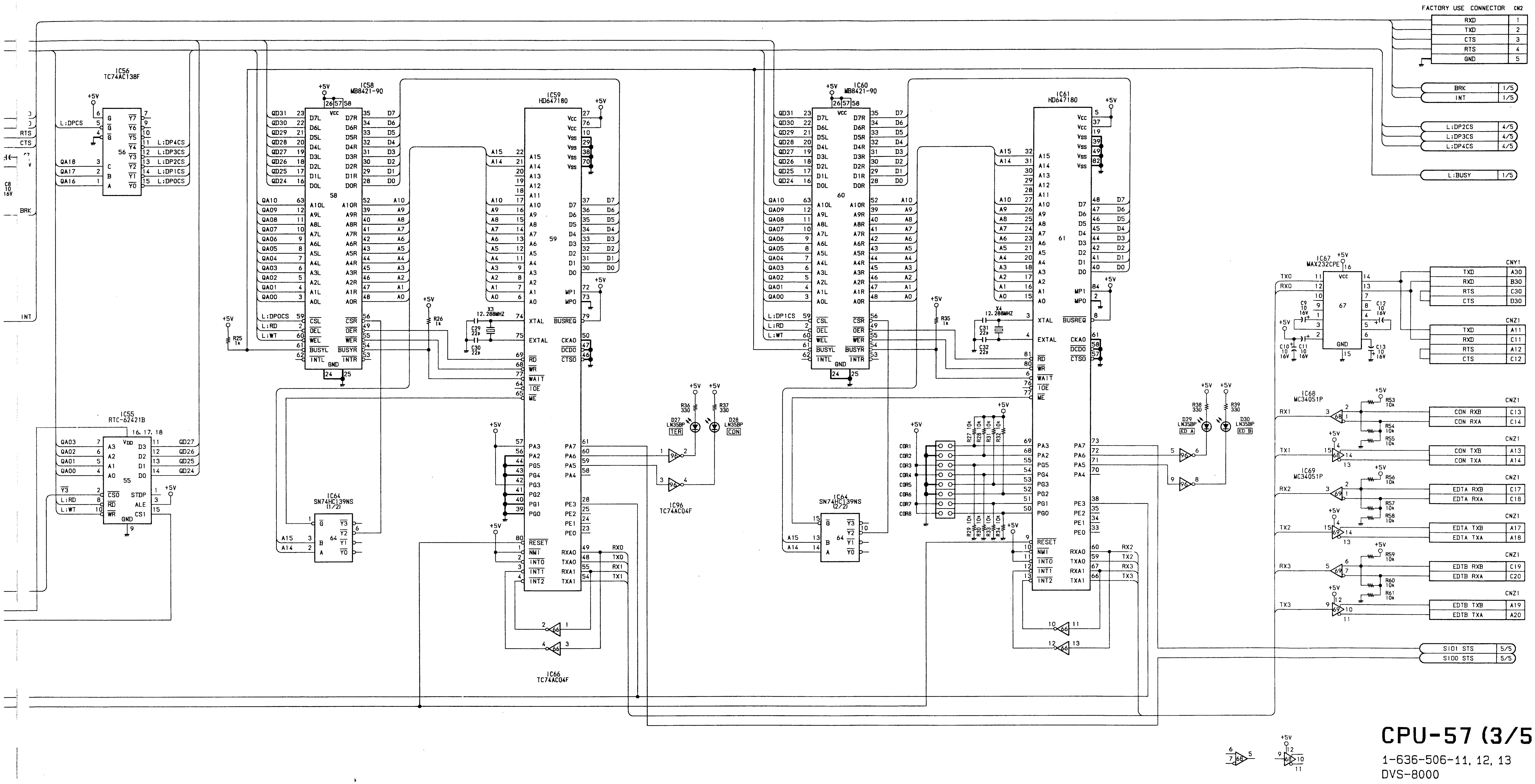
3

4

5


1/5 QD24-QD31
1/5 QA00-QA10
1/5 QA16-QA18
1/5 L:DPCS
1/5 L:SCICS
1/5 L:RD
1/5 L:WT
1/5 CLK 8M
1/5 IAK
1/5 BATT
1/5 L:RESET2
5/5 SIO CONT
1/5 L:RESET
CNX1 D15 VZ
CNX1 D14 HD
CNX1 D5 VD
IC52 TC74AC139F (1/2)
IC53 TC74AC04F
IC54 MB89394-PF
IC57 MAX232CPE
IC56 TC74AC138F
IC55 RTC-62421B
IC58 MB8421-90
IC59 HD647180
IC60 MB8421-90
IC64 SN74HC139NS (1/2)
IC64 SN74HC139NS (2/2)
IC66 TC74AC04F
IC96 TC74AC04F
X3 12.288MHZ
R22 100k
R23 100k
R24 100k
R25 1k
R26 1k
R36 330
R37 330
D27 LN35BP TER
D28 LN35BP CDN
TP8 VD
C4 10 16V
C5 10 16V
C6 10 16V
C7 10 16V
C8 10 16V
C29 22p
C30 22p
+5V
TXD
RXD
RTS
CTS
BRK
INT
L:DP4CS
L:DP3CS
L:DP2CS
L:DP1CS
L:DP0CS
RX0
TX0
RX1
TX1

A | B | C | D | E | F | G | H


FACTORY USE CONNECTOR CN2
RXD 1
TXD 2
CTS 3
RTS 4
GND 5
BRK 1/5
INT 1/5
L:DP2CS 4/5
L:DP3CS 4/5
L:DP4CS 4/5
L:BUSY 1/5
IC56 TC74AC138F
L:DPCS
RTS
CTS
BRK
INT
L:DP4CS
L:DP3CS
L:DP2CS
L:DP1CS
L:DP0CS
QA18
QA17
QA16
C8 10 16V
IC58 MB8421-90
IC59 HD647180
IC60 MB8421-90
IC61 HD647180
L:DP0CS
L:DP1CS
L:RD
L:WT
R25 1k
R26 1k
R35 1k
X3 12.288MHZ
X4 12.288MHZ
C29 22p
C30 22p
C31 22p
C32 22p
XTAL
EXTAL
BUSREQ
CKA0
DCD0
CTS0
RESET
NMI
INT0
INT1
INT2
RXA0
TXA0
RXA1
TXA1
RX0
TX0
RX1
TX1
RX2
TX2
RX3
TX3
IC55 RTC-62421B
QA03
QA02
QA01
QA00
QD27
QD26
QD25
QD24
Y3
L:RD
L:WT
IC64 SN74HC139NS (1/2)
IC64 SN74HC139NS (2/2)
A15
A14
R36 330
R37 330
D27 LN35BP TER
D28 LN35BP CDN
R38 330
R39 330
D29 LN35BP ED A
D30 LN35BP ED B
IC96 TC74AC04F
IC66 TC74AC04F
COR1
COR2
COR3
COR4
COR5
COR6
COR7
COR8
R27 10k
R28 10k
R31 10k
R32 10k
R29 10k
R30 10k
R33 10k
R34 10k
IC67 MAX232CPE
C9 10 16V
C10 10 16V
C11 10 16V
C12 10 16V
C13 10 16V
CNY1
TXD A30
RXD B30
RTS C30
CTS D30
CNZ1
TXD A11
RXD C11
RTS A12
CTS C12
IC68 MC34051P
CON RXB C13
CON RXA C14
CON TXB A13
CON TXA A14
IC69 MC34051P
EDTA RXB C17
EDTA RXA C18
EDTA TXB A17
EDTA TXA A18
EDTB RXB C19
EDTB RXA C20
EDTB TXB A19
EDTB TXA A20
R53 10k
R54 10k
R55 10k
R56 10k
R57 10k
R58 10k
R59 10k
R60 10k
R61 10k
SIO1 STS 5/5
SIO0 STS 5/5
+5V

CPU-57 (3/5)

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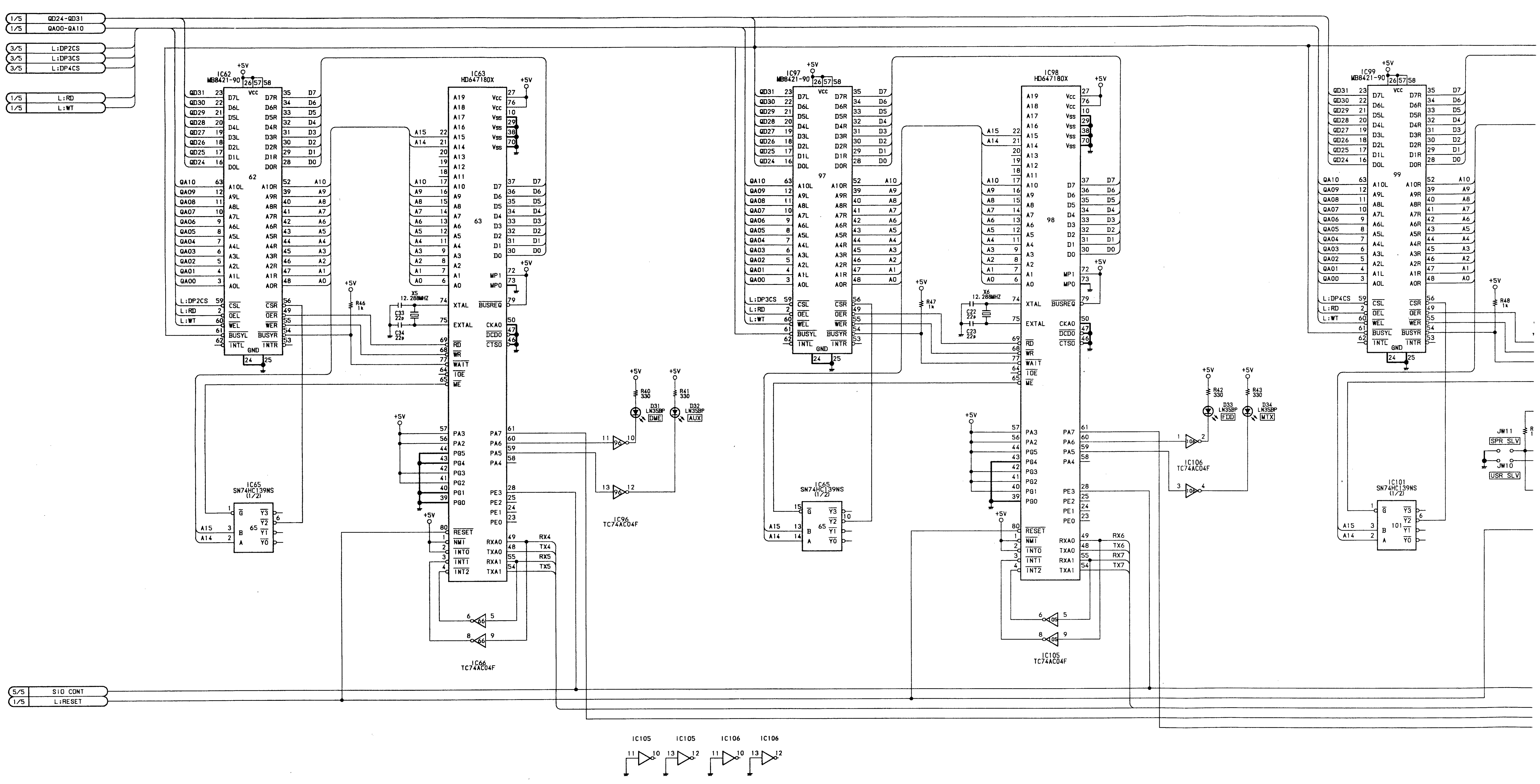
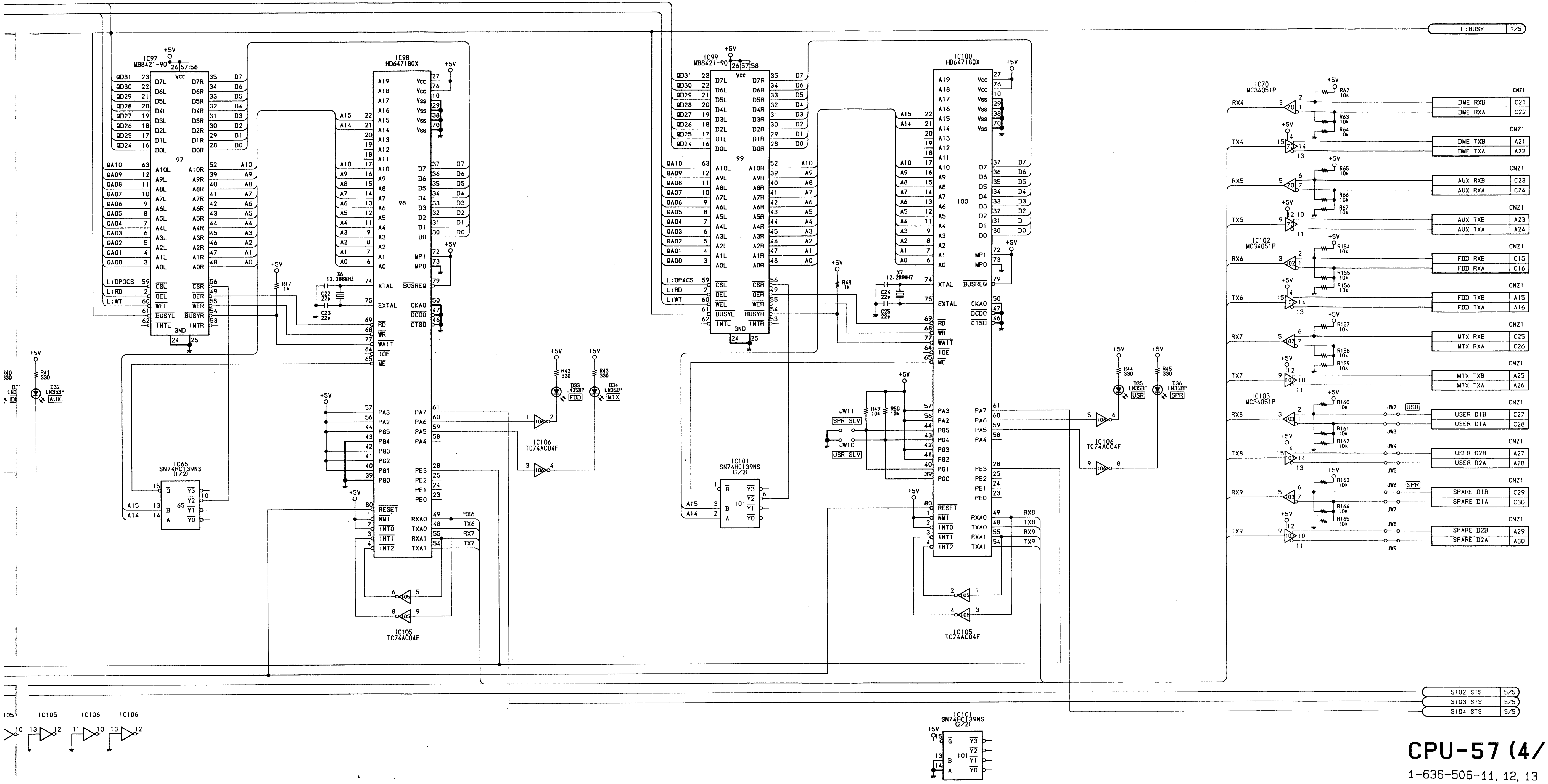
CPU-57 (4/5) CPU BOARD


1
2
3
4
5
1/5 QD24-QD31
1/5 QA00-QA10
3/5 L:DP2CS
3/5 L:DP3CS
3/5 L:DP4CS
1/5 L:RD
1/5 L:WT
IC62 MB8421-90
IC63 HD647180X
IC97 MB8421-90
IC98 HD647180X
IC99 MB8421-90
IC65 SN74HC139NS (1/2)
IC101 SN74HC139NS (1/2)
IC66 TC74AC04F
IC96 TC74AC04F
IC105 TC74AC04F
IC106 TC74AC04F
X5 12.288MHZ
X6 12.288MHZ
C33 22p
C34 22p
C22 22p
C23 22p
R46 1k
R47 1k
R48 1k
R40 330
R41 330
R42 330
R43 330
D31 LN35BP DME
D32 LN35BP AUX
D33 LN35BP FDD
D34 LN35BP MTX
JW11 SPR SLV
JW10 USR SLV
RX4
TX4
RX5
TX5
RX6
TX6
RX7
TX7
+5V
5/5 SIO CONT
1/5 L:RESET
IC105
IC105
IC106
IC106

A | B | C | D | E | F | G | H


IC97
MB8421-90
IC98
HD647180X
IC99
MB8421-90
IC100
HD647180X
IC65
SN74HC139NS
(1/2)
IC101
SN74HC139NS
(1/2)
IC101
SN74HC139NS
(2/2)
IC105
TC74AC04F
IC106
TC74AC04F
IC70
MC34051P
IC102
MC34051P
IC103
MC34051P
X6
12.288MHZ
X7
12.288MHZ
L:BUSY
1/5
L:DP3CS
L:DP4CS
L:RD
L:WT
D33
LN35BP
FDD
D34
LN35BP
MTX
D35
LN35BP
USR
D36
LN35BP
SPR
D32
LN35BP
AUX
JW10
USR SLV
JW11
SPR SLV
RX4
TX4
RX5
TX5
RX6
TX6
RX7
TX7
RX8
TX8
RX9
TX9
DME RXB
DME RXA
DME TXB
DME TXA
AUX RXB
AUX RXA
AUX TXB
AUX TXA
FDD RXB
FDD RXA
FDD TXB
FDD TXA
MTX RXB
MTX RXA
MTX TXB
MTX TXA
USER D1B
USER D1A
USER D2B
USER D2A
SPARE D1B
SPARE D1A
SPARE D2B
SPARE D2A
CNZ1
C21
C22
A21
A22
C23
C24
A23
A24
C15
C16
A15
A16
C25
C26
A25
A26
C27
C28
A27
A28
C29
C30
A29
A30
S102 STS
S103 STS
S104 STS
5/5
+5V

CPU-57 (4/5)

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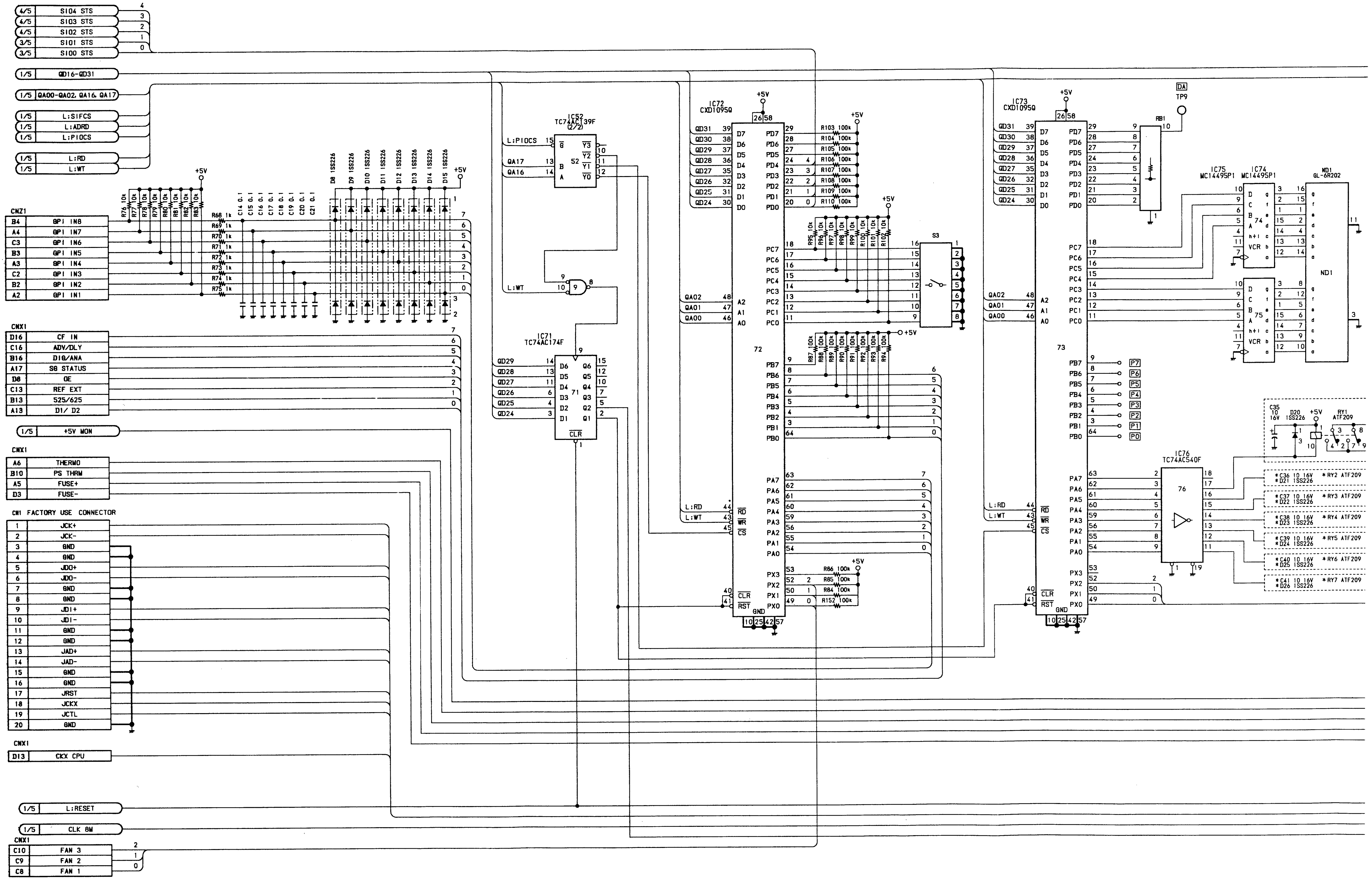
CPU-57 (5/5) CPU BOARD


4/5 SIO4 STS
4/5 SIO3 STS
4/5 SIO2 STS
3/5 SIO1 STS
3/5 SIO0 STS
1/5 QD16-QD31
1/5 QA00-QA02, QA16, QA17
1/5 L:SIFCS
1/5 L:ADRD
1/5 L:PIOCS
1/5 L:RD
1/5 L:WT
CNZ1
B4 GPI IN8
A4 GPI IN7
C3 GPI IN6
B3 GPI IN5
A3 GPI IN4
C2 GPI IN3
B2 GPI IN2
A2 GPI IN1
CNX1
D16 CF IN
C16 ADV/DLY
B16 D1B/ANA
A17 SB STATUS
D8 OE
C13 REF EXT
B13 525/625
A13 D1/ D2
1/5 +5V MON
CNX1
A6 THERMO
B10 PS THRM
A5 FUSE+
D3 FUSE-
CN1 FACTORY USE CONNECTOR
1 JCK+
2 JCK-
3 GND
4 GND
5 JDO+
6 JDO-
7 GND
8 GND
9 JDI+
10 JDI-
11 GND
12 GND
13 JAD+
14 JAD-
15 GND
16 GND
17 JRST
18 JCKX
19 JCTL
20 GND
CNX1
D13 CKX CPU
1/5 L:RESET
1/5 CLK 8M
CNX1
C10 FAN 3
C9 FAN 2
C8 FAN 1
+5V
R68 1k
R69 1k
R70 1k
R71 1k
R72 1k
R73 1k
R74 1k
R75 1k
R76 10k
R77 10k
R78 10k
R79 10k
R80 10k
R81 10k
R82 10k
R83 10k
C14 0.1
C15 0.1
C16 0.1
C17 0.1
C18 0.1
C19 0.1
C20 0.1
C21 0.1
D8 1SS226
D9 1SS226
D10 1SS226
D11 1SS226
D12 1SS226
D13 1SS226
D14 1SS226
D15 1SS226
IC52 TC74AC139F (2/2)
L:PIOCS
QA17
QA16
G
B
A
52
Y3
Y2
Y1
Y0
L:WT
IC71 TC74AC174F
QD29
QD28
QD27
QD26
QD25
QD24
D6 D5 D4 D3 D2 D1
Q6 Q5 Q4 Q3 Q2 Q1
71
CLR
IC72 CXD1095Q
+5V
QD31 QD30 QD29 QD28 QD27 QD26 QD25 QD24
D7 D6 D5 D4 D3 D2 D1 D0
PD7 PD6 PD5 PD4 PD3 PD2 PD1 PD0
R103 100k
R104 100k
R105 100k
R106 100k
R107 100k
R108 100k
R109 100k
R110 100k
QA02 QA01 QA00
A2 A1 A0
PC7 PC6 PC5 PC4 PC3 PC2 PC1 PC0
72
PB7 PB6 PB5 PB4 PB3 PB2 PB1 PB0
PA7 PA6 PA5 PA4 PA3 PA2 PA1 PA0
L:RD
L:WT
RD
WR
CS
CLR
RST
PX3 PX2 PX1 PX0
R86 100k
R85 100k
R84 100k
R152 100k
GND
R95 10k
R96 10k
R97 10k
R98 10k
R99 10k
R100 10k
R101 10k
R102 10k
R87 10k
R88 10k
R89 10k
R90 100k
R91 10k
R92 100k
R93 10k
R94 100k
S3
IC73 CXD1095Q
73
RB1
DA
TP9
IC75 MC14495P1
IC74 MC14495P1
74
75
VCR
ND1 GL-6R202
P7 P6 P5 P4 P3 P2 P1 P0
C35 10 16V
D20 1SS226
RY1 ATF209
IC76 TC74AC540F
76
C36 10 16V
D21 1SS226
RY2 ATF209
C37 10 16V
D22 1SS226
RY3 ATF209
C38 10 16V
D23 1SS226
RY4 ATF209
C39 10 16V
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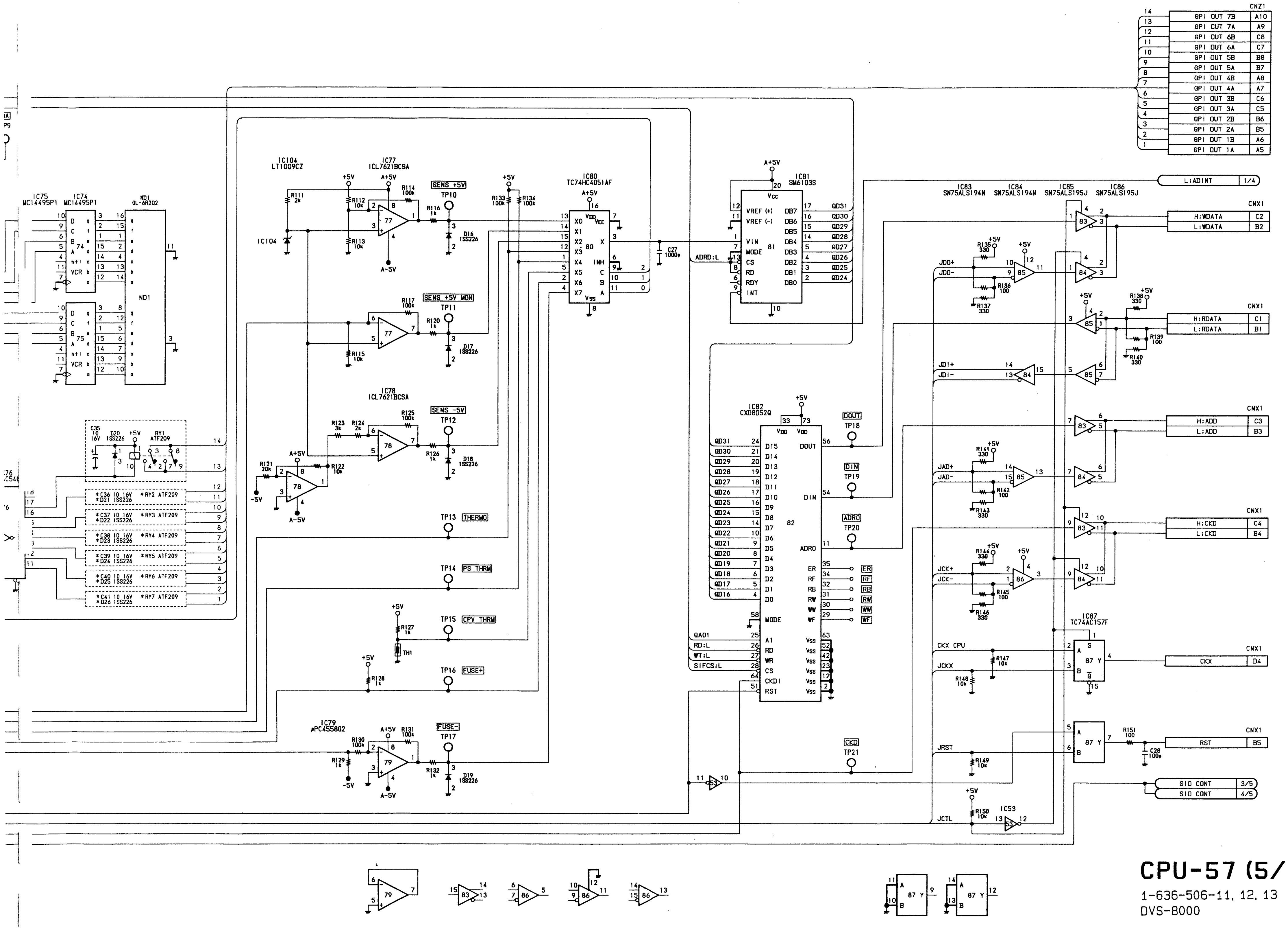
C40 10 16V
D25 1SS226
RY6 ATF209
C41 10 16V
D26 1SS226
RY7 ATF209


CNZ1
GPI OUT 7B A10
GPI OUT 7A A9
GPI OUT 6B C8
GPI OUT 6A C7
GPI OUT 5B B8
GPI OUT 5A B7
GPI OUT 4B A8
GPI OUT 4A A7
GPI OUT 3B C6
GPI OUT 3A C5
GPI OUT 2B B6
GPI OUT 2A B5
GPI OUT 1B A6
GPI OUT 1A A5
IC75 MC14495P1
IC74 MC14495P1
ND1 GL-6R202
IC104 LT1009CZ
IC77 ICL7621BCSA
IC78 ICL7621BCSA
IC79 μPC4558G2
IC80 TC74HC4051AF
IC81 SM6103S
IC82 CXD8052Q
IC83 SN75ALS194N
IC84 SN75ALS194N
IC85 SN75ALS195J
IC86 SN75ALS195J
IC87 TC74AC157F
IC53
SENS +5V
SENS +5V MON
SENS -5V
THERMO
PS THRM
CPV THRM
FUSE+
FUSE-
TP10
TP11
TP12
TP13
TP14
TP15
TP16
TP17
TP18
TP19
TP20
TP21
DOUT
DIN
ADRO
CKD
TH1
RY1 ATF209
C27 1000p
ADRD:L
L:ADINT 1/4
H:WDATA C2
L:WDATA B2
H:RDATA C1
L:RDATA B1
H:ADD C3
L:ADD B3
H:CKD C4
L:CKD B4
CKX D4
RST B5
CNX1
JDO+
JDO-
JDI+
JDI-
JAD+
JAD-
JCK+
JCK-
CKX CPU
JCKX
JRST
JCTL
SIO CONT 3/5
SIO CONT 4/5
QA01
RD:L
WT:L
SIFCS:L
ER
RF
RB
RW
WW
WF
A+5V
A-5V
+5V
-5V

CPU-57 (5/5)

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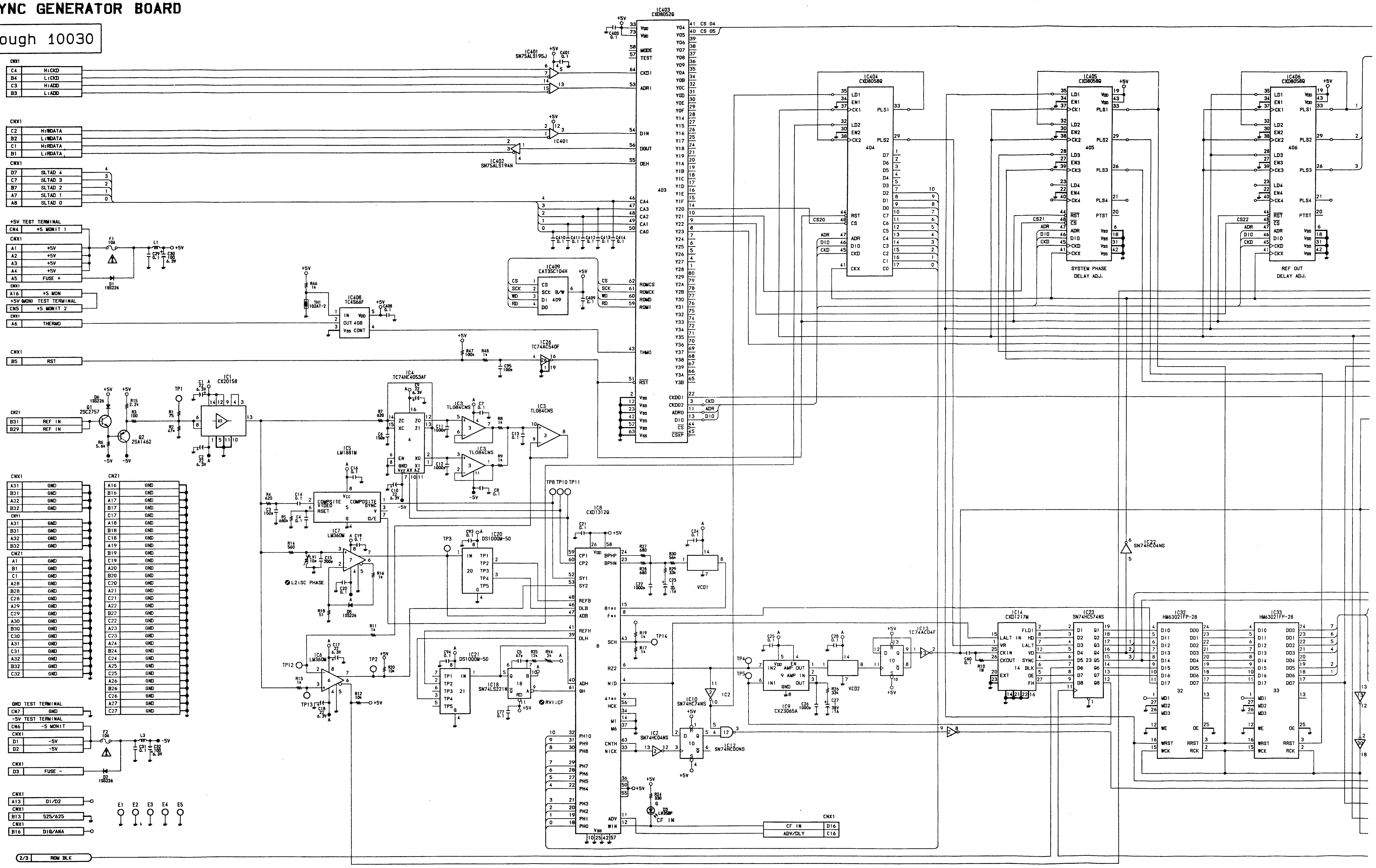
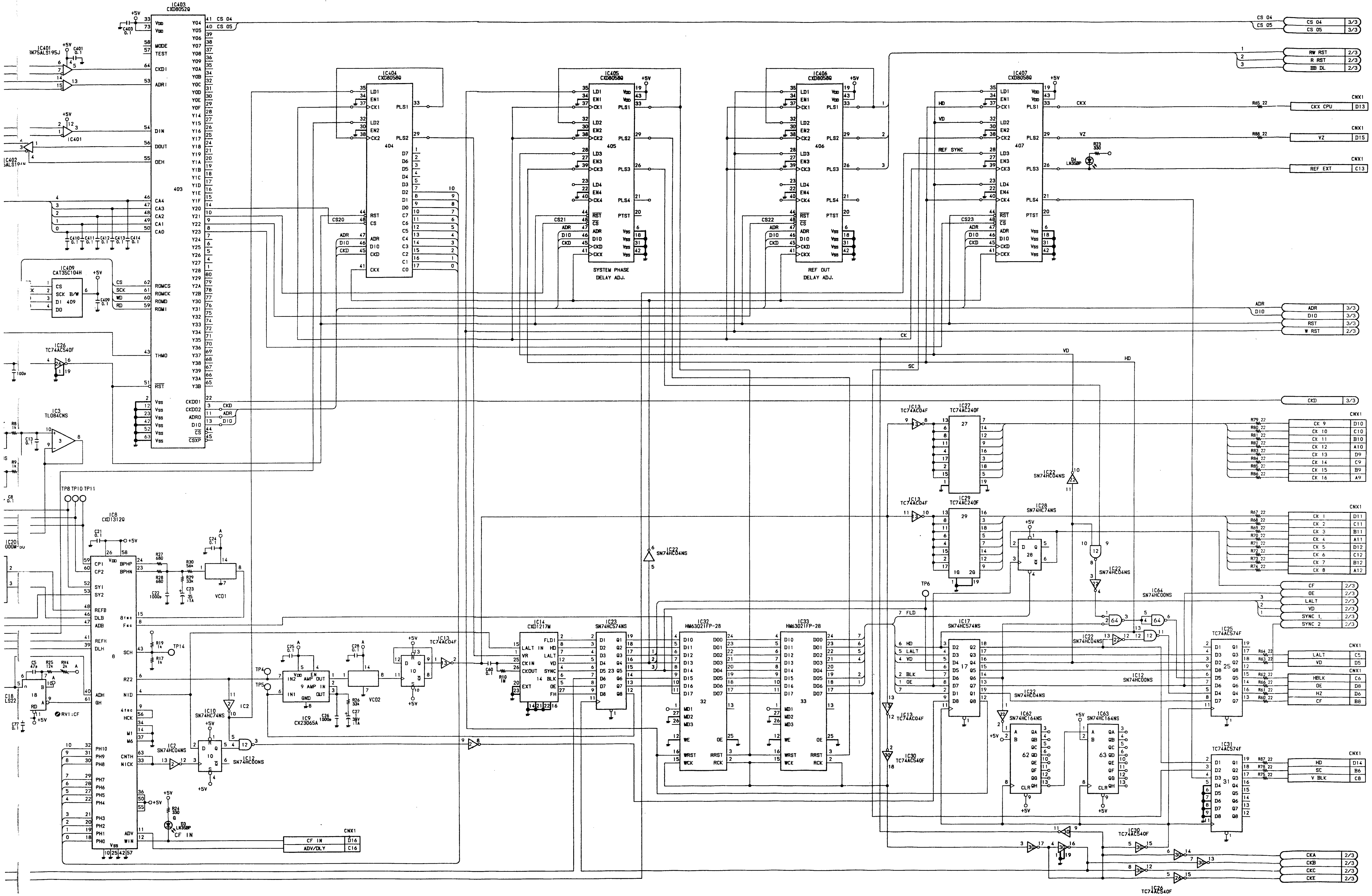
SG-153 (1/3) SYNC GENERATOR BOARD

S/N; 10001 through 10030


IC403 CXD8052Q
IC401 SN75ALS195J
IC402 SN75ALS194N
IC404 CXD8058Q
IC405 CXD8058Q
IC406 CXD8058Q
SYSTEM PHASE DELAY ADJ.
REF OUT DELAY ADJ.
IC409 CAT35C104H
IC408 TC4S66F
TH1
IC26 TC74AC540F
IC1 CX20158
IC4 TC74HC4053AF
IC3 TL084CNS
IC5 LM1881M
IC7 LM360M
L2:SC PHASE
IC6 LM360M
IC20 DS1000M-50
IC21 DS1000M-50
IC18 SN74LS221N
RV1:CF
IC8 CXD1312Q
VCO1
VCO2
IC9 CX23065A
IC10 SN74HC74NS
IC11 SN74HC00NS
IC12 SN74HC04NS
IC13 TC74AC04F
IC14 CXD1217M
IC22 SN74HC04NS
IC23 SN74HC574NS
IC32 HM63021FP-28
IC33 HM63021FP-28
Q1 2SC2757
Q2 2SA1462
F1 10A
F2 10A
D1 1SS226
D2 1SS226
CNX1
CNZ1
H:CKD
L:CKD
H:ADD
L:ADD
H:WDATA
L:WDATA
H:RDATA
L:RDATA
SLTAD 4
SLTAD 3
SLTAD 2
SLTAD 1
SLTAD 0
+5V TEST TERMINAL
+5 MONIT 1
+5V
FUSE +
+5 MON
+5V (MON) TEST TERMINAL
+5 MONIT 2
THERMO
RST
REF IN
GND
GND TEST TERMINAL
-5V TEST TERMINAL
-5 MONIT
-5V
FUSE -
D1/D2
525/625
DIG/ANA
ROM BLK
TP1
TP2
TP3
TP4
TP5
TP8 TP10 TP11
TP12
TP13
TP14
E1 E2 E3 E4 E5
CF IN
ADV/DLY
CKD
ADR
DIO
CS20
CS21
CS22

3

A B C D E F G H


IC403 CXD8052Q
IC401 SN75ALS195J
IC402
IC409 CAT35C104H
IC26 TC74AC540F
IC3 TL084CNS
IC404 CXD8058Q
IC405 CXD8058Q
SYSTEM PHASE DELAY ADJ.
IC406 CXD8058Q
REF OUT DELAY ADJ.
IC407 CXD8058Q
CS 04
CS 05
RW RST
R RST
BB DL
CKX CPU
VZ
REF EXT
ADR
DIO
RST
W RST
CKD
CNX1
CK 9
CK 10
CK 11
CK 12
CK 13
CK 14
CK 15
CK 16
CK 1
CK 2
CK 3
CK 4
CK 5
CK 6
CK 7
CK 8
CF
OE
LALT
VD
SYNC 1
SYNC 2
HBLK
HZ
HD
SC
V BLK
CKA
CKB
CKC
CKE
IC8 CXD1312Q
VCO1
IC9 CX23065A
VCO2
IC10 SN74HC74NS
IC11 SN74HC00NS
IC2 SN74HC04NS
IC13 TC74AC04F
IC14 CXD1217M
IC23 SN74HC574NS
IC32 HM63021FP-28
IC33 HM63021FP-28
IC17 SN74HC574NS
IC27 TC74AC240F
IC29 TC74AC240F
IC28 SN74HC74NS
IC22 SN74HC04NS
IC12 SN74HC00NS
IC64 SN74HC00NS
IC62 SN74HC164NS
IC63 SN74HC164NS
IC25 TC74AC574F
IC31 TC74AC574F
IC30 TC74AC540F
CF IN
ADV/DLY
TP8 TP10 TP11
TP4
TP5
TP6
TP14
RV1:CF
D3 LN35BP
D4 LN35BP

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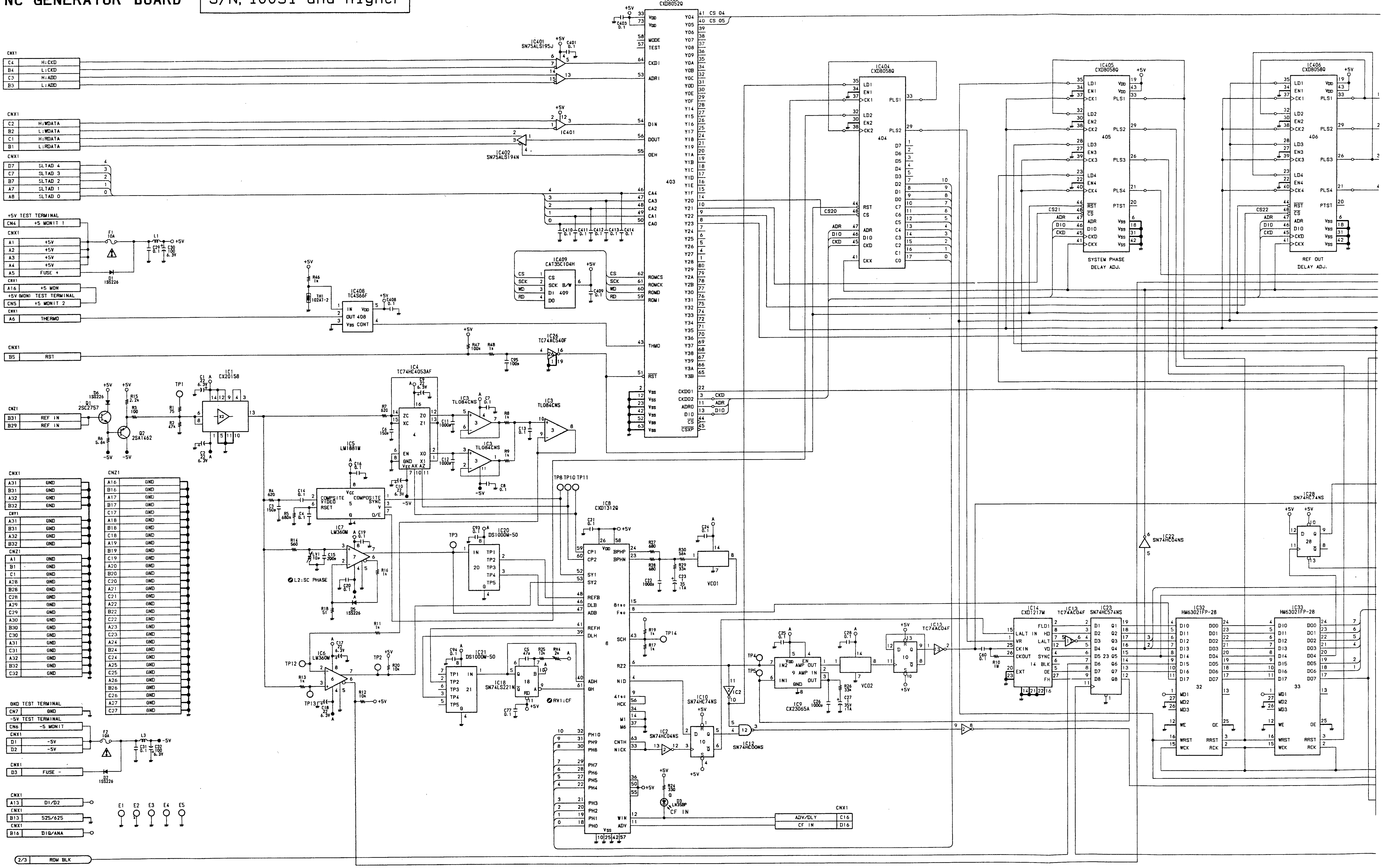
E F G H I J K L

SG-153 (1/3) SYNC GENERATOR BOARD

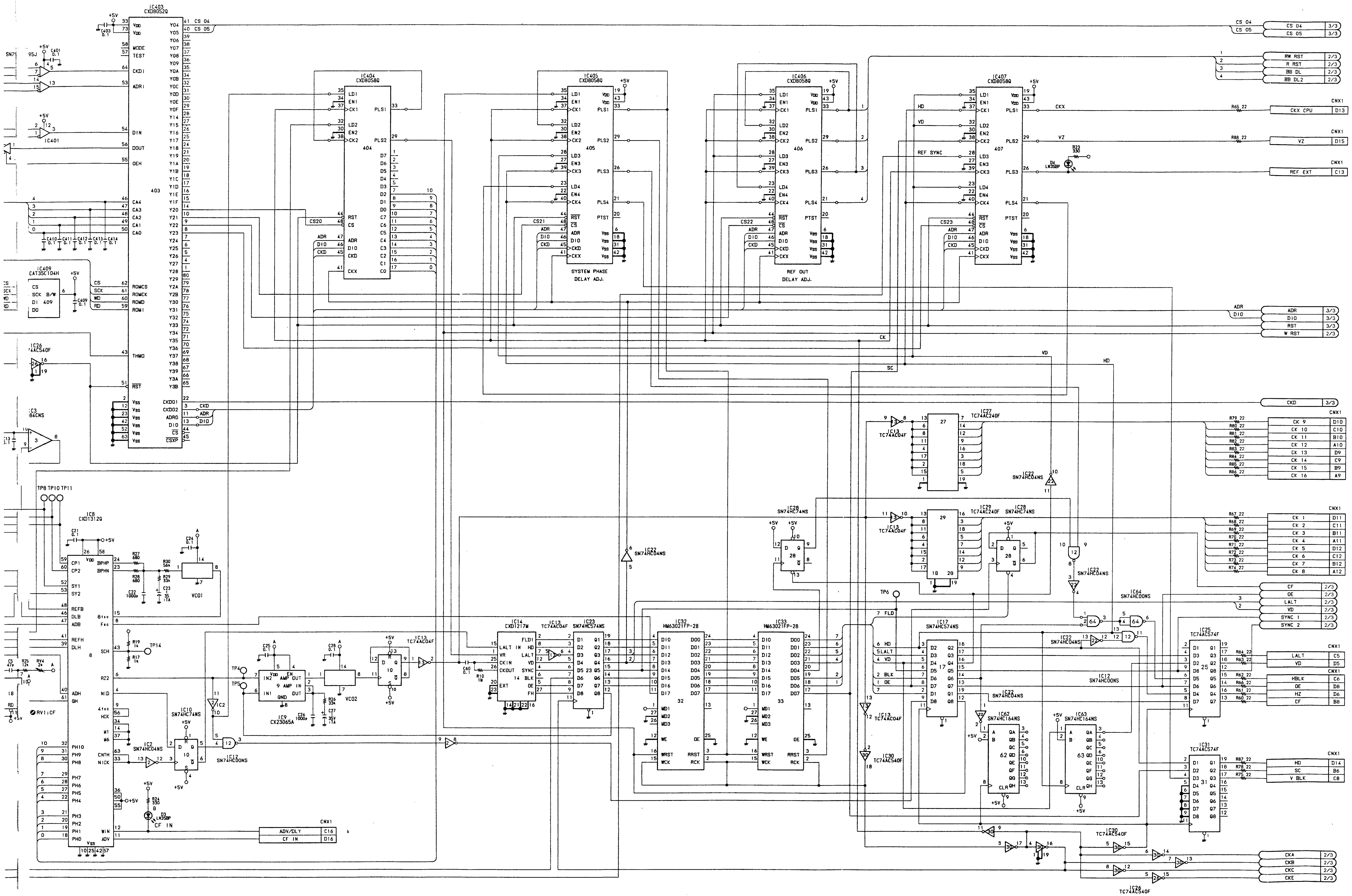
S/N; 10031 and higher


CNX1
H:CKD
L:CKD
H:ADD
L:ADD
H:WDATA
L:WDATA
H:RDATA
L:RDATA
SLTAD 4
SLTAD 3
SLTAD 2
SLTAD 1
SLTAD 0
+5V TEST TERMINAL
+5 MONIT 1
FUSE +
+5 MON
+5V MONI TEST TERMINAL
+5 MONIT 2
THERMO
RST
REF IN
GND TEST TERMINAL
-5V TEST TERMINAL
-5 MONIT
FUSE -
D1/D2
525/625
DIG/ANA
ROW BLK
IC401 SN75ALS195J
IC402 SN75ALS194N
IC403 CXD8052Q
IC404 CXD8058Q
IC405 CXD8058Q
IC406 CXD8058Q
SYSTEM PHASE DELAY ADJ.
REF OUT DELAY ADJ.
IC409 CAT35C104H
IC408 TC4S66F
IC26 TC74AC540F
IC1 CX20158
IC4 TC74HC4053AF
IC3 TL084CNS
IC5 LM1881M
IC7 LM360M
IC20 DS1000M-50
IC8 CXD1312Q
IC6 LM360M
IC21 DS1000M-50
IC18 SN74LS221N
IC10 SN74HC74NS
IC2 SN74HC04NS
IC12 SN74HC00NS
IC9 CX23065A
IC15 TC74AC04F
IC14 CXD1217M
IC13 TC74AC04F
IC23 SN74HC574NS
IC22 SN74HC04NS
IC28 SN74HC74NS
IC32 HM63021FP-28
IC33 HM63021FP-28
Q1 2SC2757
Q2 2SA1462
L2:SC PHASE
RV1:CF
VCO1
VCO2
LN358P CF IN
ADV/DLY
CF IN
TP1
TP2
TP3
TP4
TP5
TP8 TP10 TP11
TP12
TP13
TP14
E1 E2 E3 E4 E5

9-36 (b)

9-37 (b)

A | B | C | D | E | F | G | H


IC403
CXD8052Q
IC404
CXD8058Q
IC405
CXD8058Q
SYSTEM PHASE
DELAY ADJ.
IC406
CXD8058Q
REF OUT
DELAY ADJ.
IC407
CXD8058Q
IC409
CAT35C104H
IC401
IC26
74AC540F
IC3
IC8
CXD1312Q
VCO1
IC9
CX23065A
VCO2
IC10
SN74HC74NS
IC12
SN74HC00NS
IC14
CXD1217M
IC13
TC74AC04F
IC23
SN74HC574NS
IC32
HM63021FP-28
IC33
HM63021FP-28
IC22
SN74HC04NS
IC27
TC74AC240F
IC29
TC74AC240F
IC28
SN74HC74NS
IC17
SN74HC574NS
IC62
SN74HC164NS
IC63
SN74HC164NS
IC64
SN74HC00NS
IC25
TC74AC574F
IC31
TC74AC574F
IC30
TC74AC540F
CS 04
CS 05
RW RST
R RST
BB DL
BB DL2
CKX CPU
VZ
REF EXT
CNX1
ADR
DIO
RST
W RST
CKD
CK 1
CK 2
CK 3
CK 4
CK 5
CK 6
CK 7
CK 8
CK 9
CK 10
CK 11
CK 12
CK 13
CK 14
CK 15
CK 16
CF
OE
LALT
VD
SYNC 1
SYNC 2
HBLK
HZ
HD
SC
V BLK
CKA
CKB
CKC
CKE
ADV/DLY
CF IN
TP6
TP8
TP10
TP11
TP14
RV1:CF
D3
LN358P
CF IN

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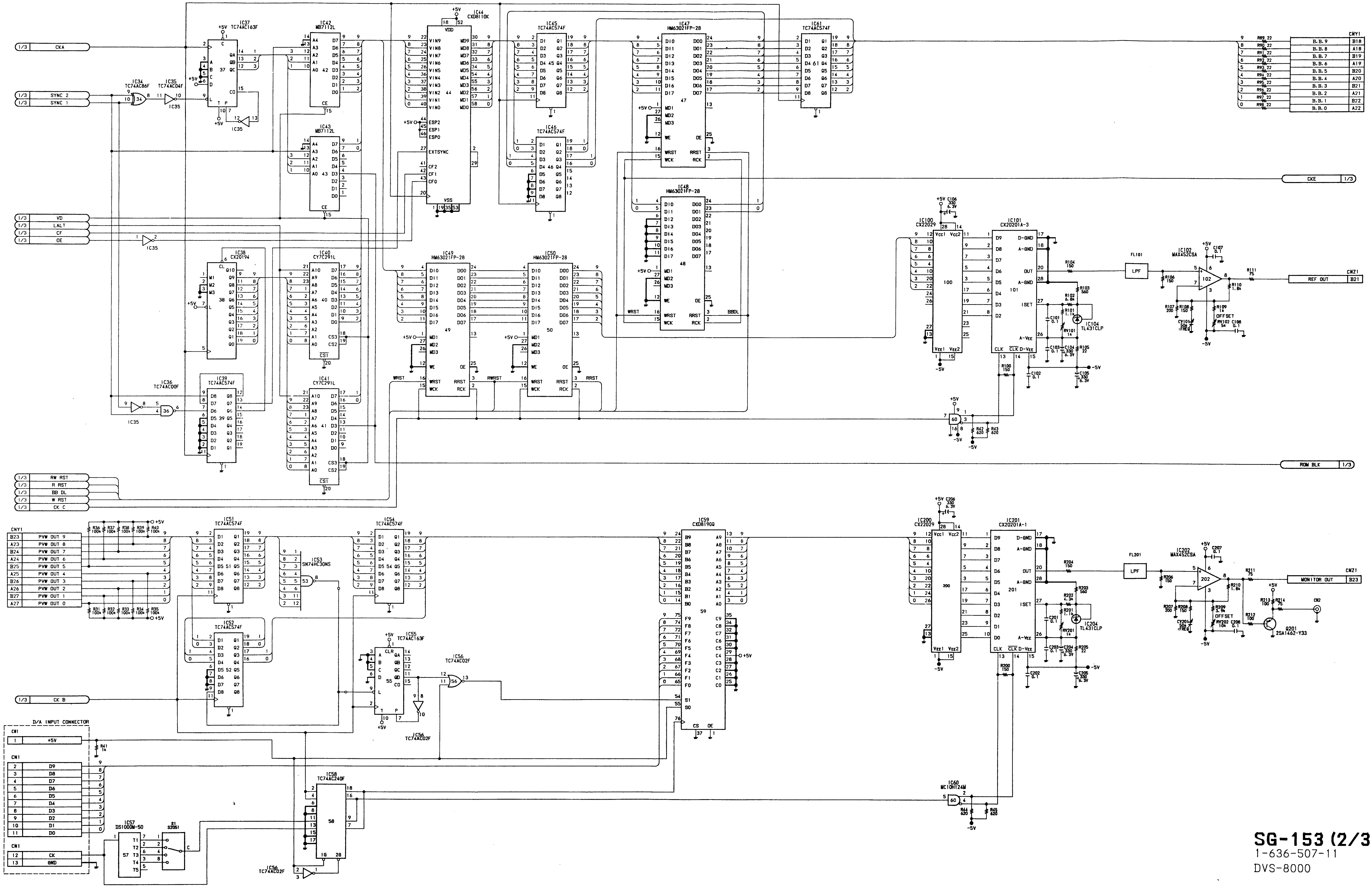
| E | F | G | H | I | J | K | L |

SG-153 (2/3) SYNC GENERATOR BOARD

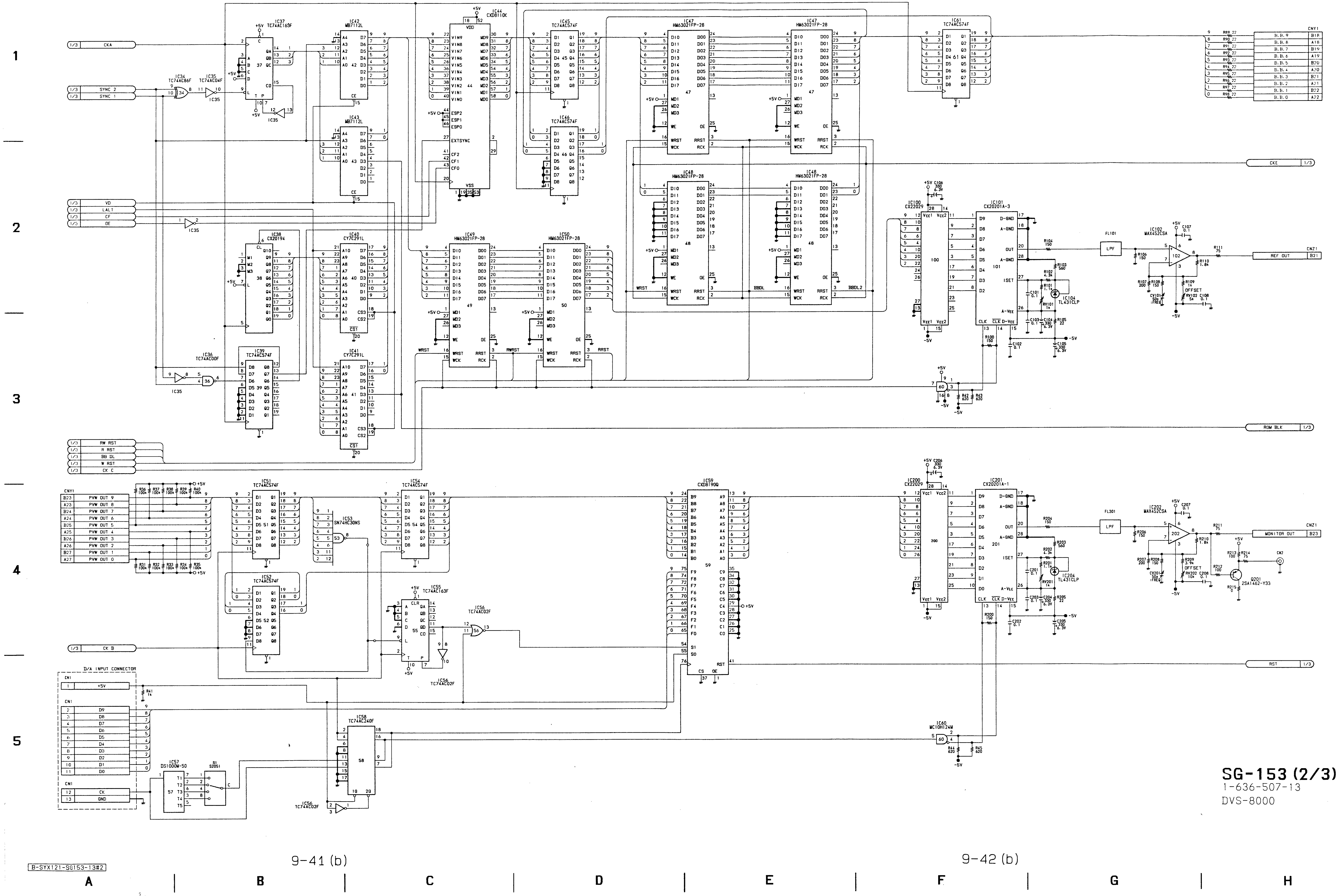
S/N; 10001 through 10030


1
2
3
4
5
CKA
SYNC 2
SYNC 1
IC34 TC74AC86F
IC35 TC74AC04F
IC37 TC74AC163F
IC42 MB7112L
IC43 MB7112L
IC44 CXD8110K
IC45 TC74AC574F
IC46 TC74AC574F
IC47 HM63021FP-28
IC48 HM63021FP-28
IC61 TC74AC574F
CNY1
B.B.9
B.B.8
B.B.7
B.B.6
B.B.5
B.B.4
B.B.3
B.B.2
B.B.1
B.B.0
CKE
VD
LALT
CF
OE
IC38 CX20194
IC40 CY7C291L
IC41 CY7C291L
IC36 TC74AC00F
IC39 TC74AC574F
IC49 HM63021FP-28
IC50 HM63021FP-28
IC100 CX22029
IC101 CX20201A-3
FL101
LPF
IC102 MAX452CSA
IC104 TL431CLP
REF OUT
CNZ1
ROW BLK
RW RST
R RST
BB DL
W RST
CK C
PVW OUT 9
PVW OUT 8
PVW OUT 7
PVW OUT 6
PVW OUT 5
PVW OUT 4
PVW OUT 3
PVW OUT 2
PVW OUT 1
PVW OUT 0
IC51 TC74AC574F
IC52 TC74AC574F
IC53 SN74HC30NS
IC54 TC74AC574F
IC55 TC74AC163F
IC56 TC74AC02F
IC59 CXD8190Q
IC200 CX22029
IC201 CX20201A-1
FL201
IC202 MAX452CSA
IC204 TL431CLP
MONITOR OUT
CN2
Q201 2SA1462-Y33
CK B
D/A INPUT CONNECTOR
CN1
+5V
D9
D8
D7
D6
D5
D4
D3
D2
D1
D0
CK
GND
IC57 DS1000M-50
S1 S2051
IC58 TC74AC240F
IC60 MC10H124M

SG-153 (2/3)
1-636-507-11
DVS-8000

SG-153 (2/3) SYNC GENERATOR BOARD

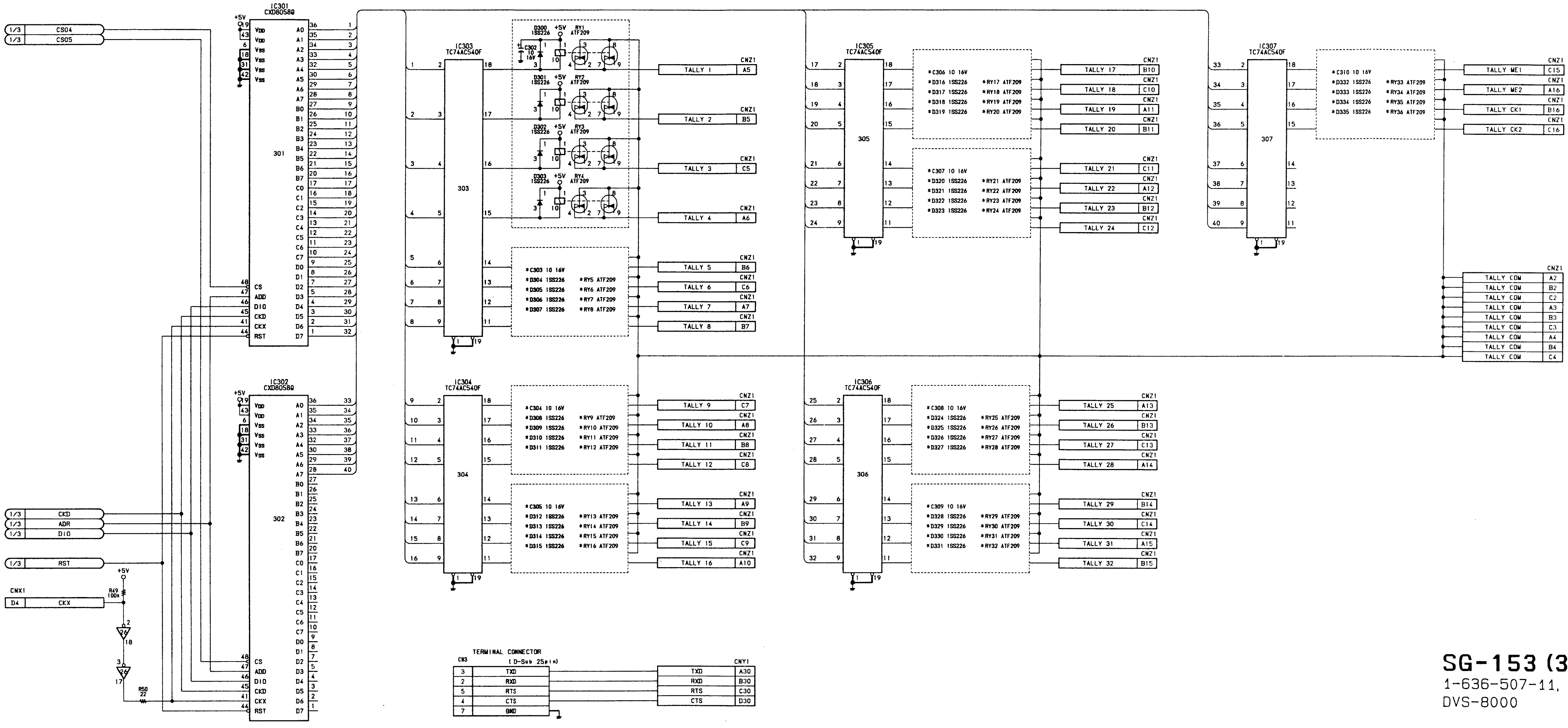
S/N; 10031 and higher


1
2
3
4
5
CKA
SYNC 2
SYNC 1
VD
LALT
CF
OE
RW RST
R RST
BB DL
W RST
CK C
CK B
CKE
ROM BLK
RST
IC34 TC74AC86F
IC35 TC74AC04F
IC36 TC74AC00F
IC37 TC74AC163F
IC38 CX20194
IC39 TC74AC574F
IC40 CY7C291L
IC41 CY7C291L
IC42 MB7112L
IC43 MB7112L
IC44 CXD8110K
IC45 TC74AC574F
IC46 TC74AC574F
IC47 HM63021FP-28
IC48 HM63021FP-28
IC49 HM63021FP-28
IC50 HM63021FP-28
IC51 TC74AC574F
IC52 TC74AC574F
IC53 SN74HC30NS
IC54 TC74AC574F
IC55 TC74AC163F
IC56 TC74AC02F
IC57 DS1000M-50
IC58 TC74AC240F
IC59 CXD8190Q
IC60 MC10H124M
IC61 TC74AC574F
IC100 CX22029
IC101 CX20201A-3
IC102 MAX452CSA
IC104 TL431CLP
IC200 CX22029
IC201 CX20201A-1
IC202 MAX452CSA
IC204 TL431CLP
Q201 2SA1462-Y33
FL101 LPF
FL201 LPF
S1 S2051
D/A INPUT CONNECTOR
CN1
CNY1
CNZ1
REF OUT
MONITOR OUT
CK2
OFFSET
FREQ
PVW OUT 9
PVW OUT 8
PVW OUT 7
PVW OUT 6
PVW OUT 5
PVW OUT 4
PVW OUT 3
PVW OUT 2
PVW OUT 1
PVW OUT 0
B.B.9
B.B.8
B.B.7
B.B.6
B.B.5
B.B.4
B.B.3
B.B.2
B.B.1
B.B.0
+5V
-5V
GND

SG-153 (2/3)
1-636-507-13
DVS-8000

B-SYX121-SG153-13#2

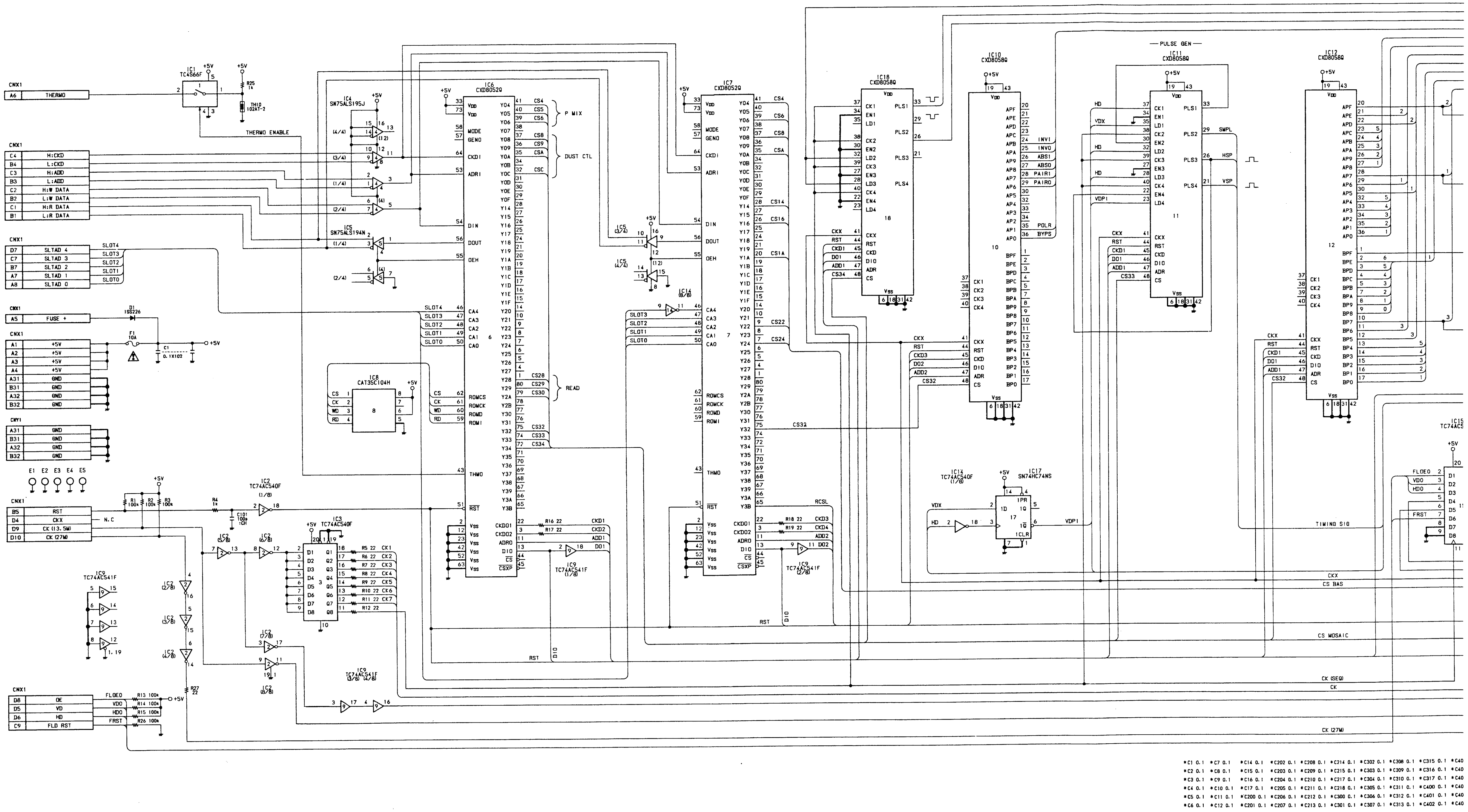
SG-153 (3/3) SYNC GENERATOR BOARD

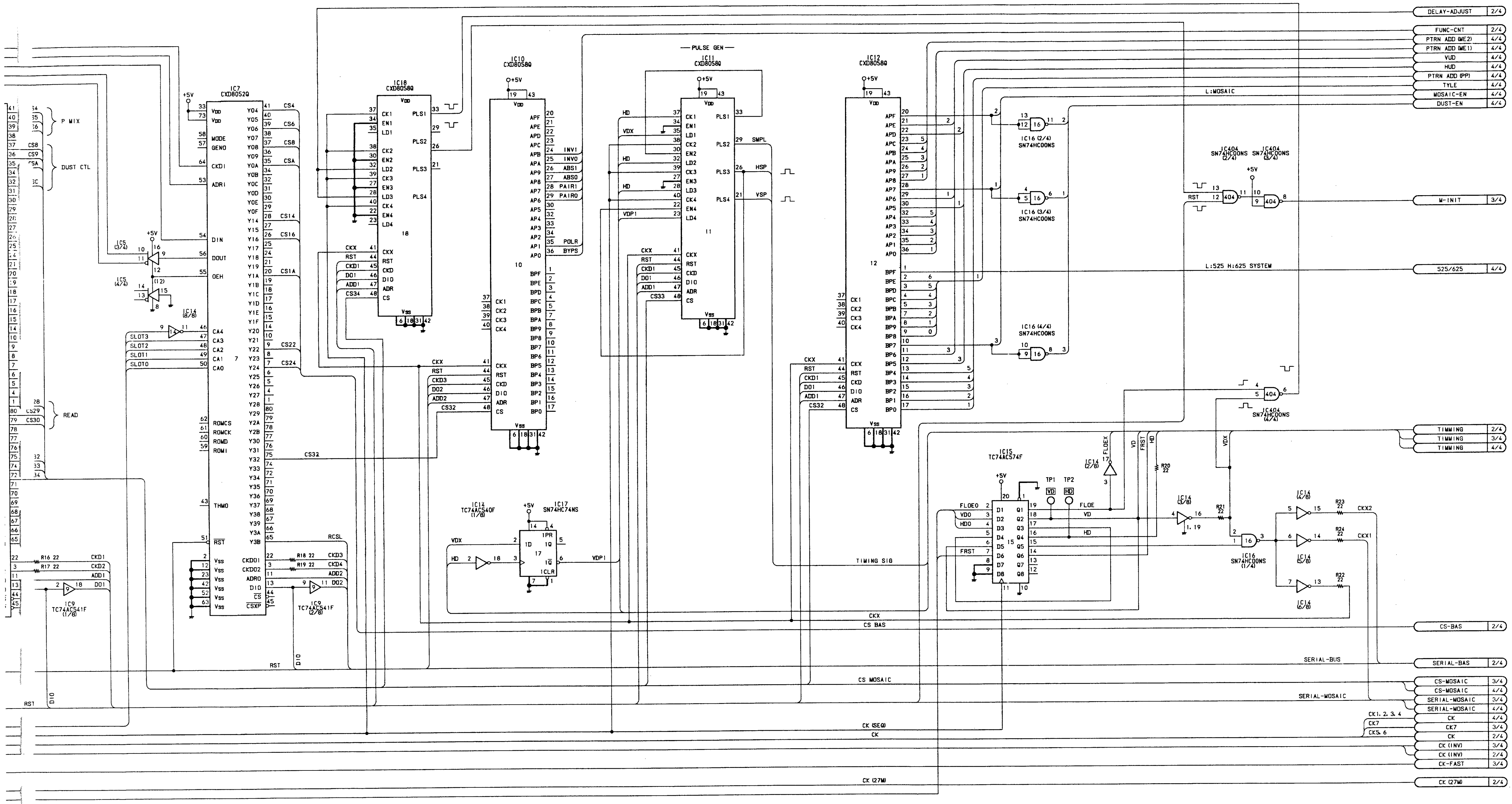

IC301
CXD8058Q
IC302
CXD8058Q
IC303
TC74AC540F
IC304
TC74AC540F
IC305
TC74AC540F
IC306
TC74AC540F
IC307
TC74AC540F
CS04
CS05
CKD
ADR
DIO
RST
CNX1
D4
CKX
R49
100k
R50
22
+5V
D300
1SS226
RY1
ATF209
C302
10
16V
TALLY 1
TALLY 2
TALLY 3
TALLY 4
TALLY 5
TALLY 6
TALLY 7
TALLY 8
TALLY 9
TALLY 10
TALLY 11
TALLY 12
TALLY 13
TALLY 14
TALLY 15
TALLY 16
TALLY 17
TALLY 18
TALLY 19
TALLY 20
TALLY 21
TALLY 22
TALLY 23
TALLY 24
TALLY 25
TALLY 26
TALLY 27
TALLY 28
TALLY 29
TALLY 30
TALLY 31
TALLY 32
TALLY ME1
TALLY ME2
TALLY CK1
TALLY CK2
TALLY COM
CNZ1
TERMINAL CONNECTOR
CN3
(D-Sub 25pin)
TXD
RXD
RTS
CTS
GND
CNY1
A30
B30
C30
D30
1
2
3
4
5
A
B
C
D
E
F
G
H

SG-153 (3/3)
1-636-507-11, 13
DVS-8000

WKG-5 (1/4) ENHANCED WIPE BOARD

S/N; 10001 through 10030

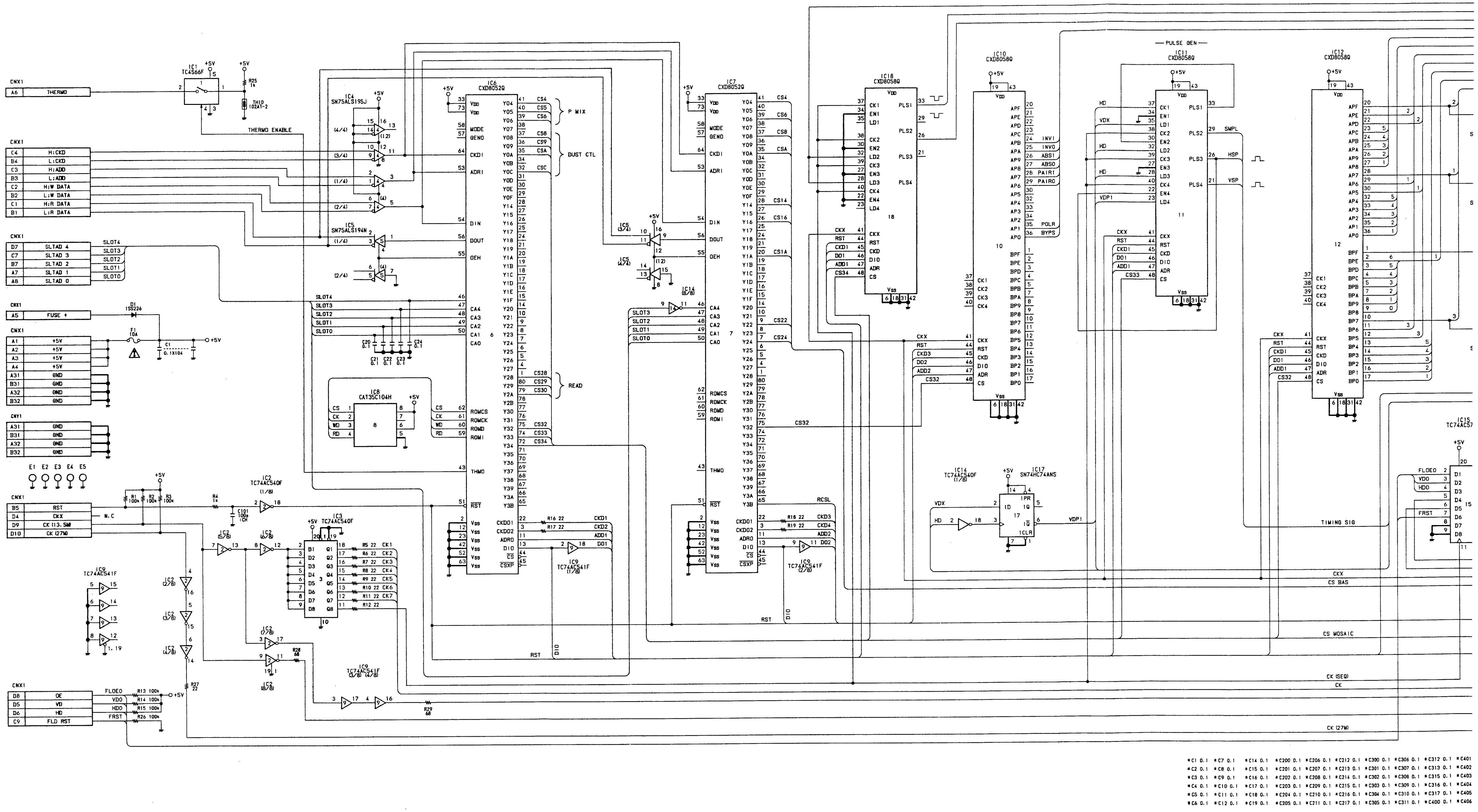

CNX1
THERMO
THERMO ENABLE
IC1 TC4S66F
TH10 102AT-2
H:CKD
L:CKD
H:ADD
L:ADD
H:W DATA
L:W DATA
H:R DATA
L:R DATA
SLTAD 4
SLTAD 3
SLTAD 2
SLTAD 1
SLTAD 0
FUSE +
D1 1SS226
F1 10A
+5V
GND
CNY1
E1 E2 E3 E4 E5
RST
CKX
CK (13.5M)
CK (27M)
N.C
IC4 SN75ALS195J
IC5 SN75ALS194N
IC6 CXD8052Q
IC7 CXD8052Q
IC8 CAT35C104H
IC2 TC74AC540F
IC3 TC74AC540F
IC9 TC74AC541F
P MIX
DUST CTL
READ
CS4
CS5
CS6
CS8
CS9
CSA
CSC
CS14
CS16
CS1A
CS22
CS24
CS28
CS29
CS30
CS32
CS33
CS34
RCSL
SLOT4
SLOT3
SLOT2
SLOT1
SLOT0
ROMCS
ROMCK
ROMD
ROMI
THMO
CKDO1
CKDO2
ADRO
DIO
CSXP
IC18 CXD8058Q
IC10 CXD8058Q
IC11 CXD8058Q
IC12 CXD8058Q
PULSE GEN
PLS1
PLS2
PLS3
PLS4
INV1
INV0
ABS1
ABS0
PAIR1
PAIR0
POLR
BYPS
SMPL
HSP
VSP
HD
VD
VDX
VDP1
IC14 TC74AC540F
IC17 SN74HC74NS
IC15 TC74AC5
TIMING SIG
CKX
CS BAS
CS MOSAIC
CK (SEQ)
CK
CK (27M)
OE
FLD RST
FLOEO
VDO
HDO
FRST
R13 100k
R14 100k
R15 100k
R26 100k


P MIX
DUST CTL
READ
IC7 CXD8052Q
IC18 CXD8058Q
IC10 CXD8058Q
— PULSE GEN —
IC11 CXD8058Q
IC12 CXD8058Q
IC5 (3/4)
IC5 (4/4)
IC14 (8/8)
IC9 TC74AC541F (1/8)
IC9 TC74AC541F (2/8)
IC14 TC74AC540F (1/8)
IC17 SN74HC74NS
IC16 (2/4) SN74HC00NS
IC16 (3/4) SN74HC00NS
IC16 (4/4) SN74HC00NS
IC16 (1/4) SN74HC00NS
IC404 SN74HC00NS (2/4)
IC404 SN74HC00NS (3/4)
IC404 SN74HC00NS (4/4)
IC15 TC74AC574F
IC14 (2/8)
IC14 (3/8)
IC14 (4/8)
IC14 (5/8)
IC14 (6/8)
TP1
TP2
L:MOSAIC
L:525 H:625 SYSTEM
TIMING SIG
SMPL
HSP
VSP
VDX
HD
VDP1
CS32
RCSL
CKX
CS BAS
RST
CS MOSAIC
SERIAL-BUS
SERIAL-MOSAIC
CK (SEQ)
CK
CK (27M)
CK1, 2, 3, 4
CK7
CK5, 6
CKX2
CKX1
DELAY-ADJUST 2/4
FUNC-CNT 2/4
PTRN ADD (ME2) 4/4
PTRN ADD (ME1) 4/4
VUD 4/4
HUD 4/4
PTRN ADD (PP) 4/4
TYLE 4/4
MOSAIC-EN 4/4
DUST-EN 4/4
M-INIT 3/4
525/625 4/4
TIMING 2/4
TIMING 3/4
TIMING 4/4
CS-BAS 2/4
SERIAL-BAS 2/4
CS-MOSAIC 3/4
CS-MOSAIC 4/4
SERIAL-MOSAIC 3/4
SERIAL-MOSAIC 4/4
CK 4/4
CK7 3/4
CK 2/4
CK (INV) 3/4
CK (INV) 2/4
CK-FAST 3/4
CK (27M) 2/4

*C1 0.1
*C2 0.1
*C3 0.1
*C4 0.1
*C5 0.1
*C6 0.1
*C7 0.1
*C8 0.1
*C9 0.1
*C10 0.1
*C11 0.1
*C12 0.1
*C14 0.1
*C15 0.1
*C16 0.1
*C17 0.1
*C200 0.1
*C201 0.1
*C202 0.1
*C203 0.1
*C204 0.1
*C205 0.1
*C206 0.1
*C207 0.1
*C208 0.1
*C209 0.1
*C210 0.1
*C211 0.1
*C212 0.1
*C213 0.1
*C214 0.1
*C215 0.1
*C217 0.1
*C218 0.1
*C300 0.1
*C301 0.1
*C302 0.1
*C303 0.1
*C304 0.1
*C305 0.1
*C306 0.1
*C307 0.1
*C308 0.1
*C309 0.1
*C310 0.1
*C311 0.1
*C312 0.1
*C313 0.1
*C315 0.1
*C316 0.1
*C317 0.1
*C400 0.1
*C401 0.1
*C402 0.1
*C403 0.1
*C404 0.1
*C405 0.1
*C406 0.1
*C407 0.1
*C408 0.1
*C409 0.1
*C410 0.1
*C411 0.1
*C412 0.1
*C413 0.1
*C414 0.1
*C415 0.1
*C416 0.1
*C417 0.1
*C418 0.1
*C419 0.1
*C420 0.1
*C421 0.1
*C422 0.1
*C423 0.1
*C428 0.1
*C429 0.1
*C430 0.1
*C431 0.1
*C432 0.1
*C433 0.1
*C434 0.1
*C435 0.1
*C436 0.1
*C437 0.1
*C438 0.1
*C439 0.1
*C440 0.1
*C441 0.1
*C442 0.1
*C443 0.1
*C444 0.1
*C445 0.1
*C446 0.1
*C447 0.1
*C448 0.1
*C449 0.1
*C450 0.1
*C451 0.1
*C452 0.1
*C453 0.1
*C454 0.1

WKG-5 (1/4)
1-636-509-11
DVS-8000

WKG-5 ENHANCED WIPE BOARD S/N; 10031 and higher

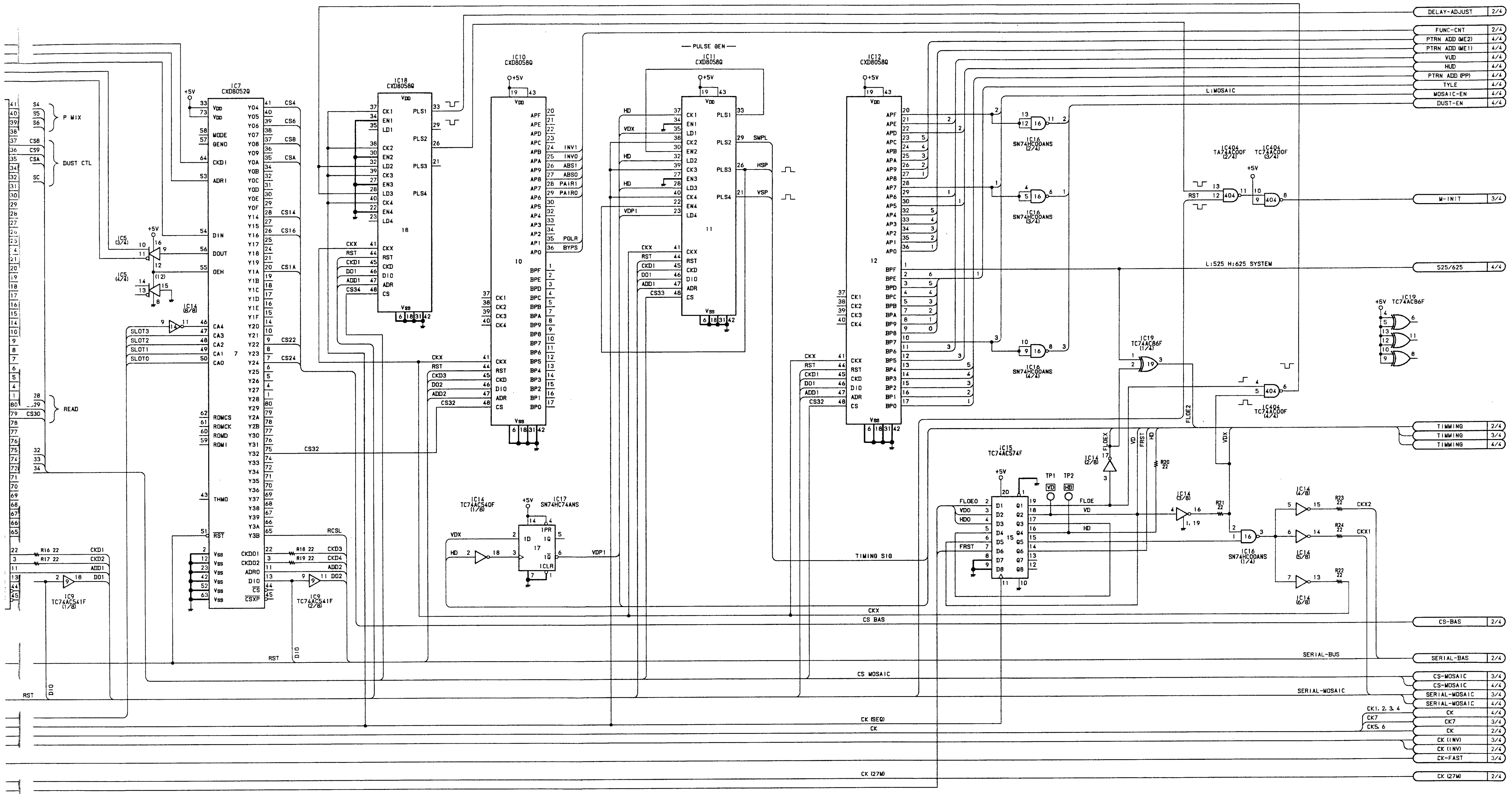

1
2
3
4
5
CNX1
THERMO
THERMO ENABLE
IC1 TC4S66F
TH10 102A1-2
R25 1k
H:CKD
L:CKD
H:ADD
L:ADD
H:W DATA
L:W DATA
H:R DATA
L:R DATA
SLTAD 4
SLTAD 3
SLTAD 2
SLTAD 1
SLTAD 0
SLOT4
SLOT3
SLOT2
SLOT1
SLOT0
FUSE +
D1 1SS226
F1 10A
C1 0.1X104
+5V
GND
CNY1
E1 E2 E3 E4 E5
RST
CKX
CK (13.5M)
CK (27M)
N.C
IC4 SN75ALS195J
IC5 SN75ALS194N
IC6 CXD8052Q
IC7 CXD8052Q
IC8 CAT35C104H
P MIX
DUST CTL
READ
IC2 TC74AC540F
IC3 TC74AC540F
IC9 TC74AC541F
IC14 TC74AC540F
IC17 SN74HC74ANS
IC18 CXD8058Q
IC10 CXD8058Q
PULSE GEN
IC11 CXD8058Q
IC12 CXD8058Q
IC15 TC74AC5
HD
VDX
VDP1
INV1
INV0
ABS1
ABS0
PAIR1
PAIR0
POLR
BYPS
SMPL
HSP
VSP
CS32
CS33
CS34
RCSL
D10
TIMING SIG
CS BAS
CS MOSAIC
CK (SEQ)
CK
CK (27M)
FLDEO
VDO
HDO
FRST
OE
VD
HD
FLD RST

9-50 (b)

9-51 (b)

B-SYX121-WKG5-13#1

A | B | C | D | E | F | G | H

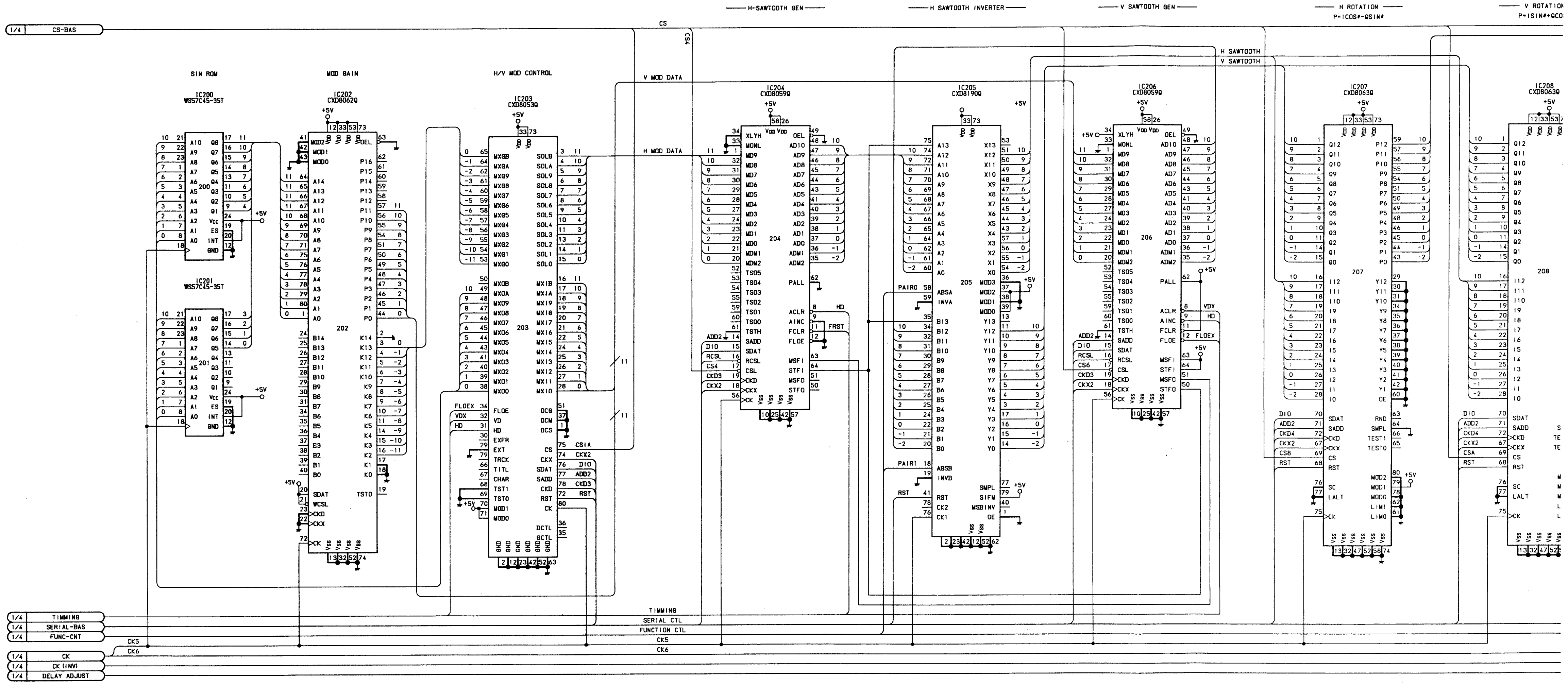

P MIX
DUST CTL
READ
S4
S5
S6
CS8
CS9
CSA
SC
CS30
IC7
CXD8052Q
IC18
CXD8058Q
IC10
CXD8058Q
PULSE GEN
IC11
CXD8058Q
IC12
CXD8058Q
IC5 (3/4)
IC5 (4/4)
IC14 (8/8)
IC9 TC74AC541F (1/8)
IC9 TC74AC541F (2/8)
IC14 TC74AC540F (1/8)
IC17 SN74HC74ANS
IC16 SN74HC00ANS (2/4)
IC16 SN74HC00ANS (3/4)
IC16 SN74HC00ANS (4/4)
IC16 SN74HC00ANS (1/4)
IC404 TA74AC00F (2/4)
IC404 TC74AC00F (3/4)
IC404 TC74AC00F (4/4)
IC19 TC74AC86F (1/4)
IC19 TC74AC86F
IC15 TC74AC574F
IC11 (7/8)
IC14 (3/8)
IC14 (4/8)
IC14 (5/8)
IC14 (6/8)
TP1
TP2
VD
HD
VDX
VDP1
SMPL
HSP
VSP
INV1
INV0
ABS1
ABS0
PAIR1
PAIR0
POLR
BYPS
CKX
RST
CKD1
CKD2
CKD3
CKD4
DO1
DO2
ADD1
ADD2
CS22
CS24
CS32
CS33
CS34
CS4
CS6
CS8
CSA
CS14
CS16
CS1A
RCSL
DIO
FLOE0
VD0
HD0
FRST
FLOE
FLOE2
FLOEX
CKX1
CKX2
R16 22
R17 22
R18 22
R19 22
R20 22
R21 22
R22 22
R23 22
R24 22
L:MOSAIC
L:525 H:625 SYSTEM
TIMING SIG
CS BAS
CS MOSAIC
SERIAL-BUS
SERIAL-MOSAIC
CK (SEQ)
CK
CK (27M)
CK1, 2, 3, 4
CK7
CK5, 6
SLOT0
SLOT1
SLOT2
SLOT3
+5V
DELAY-ADJUST 2/4
FUNC-CNT 2/4
PTRN ADD (ME2) 4/4
PTRN ADD (ME1) 4/4
VUD 4/4
HUD 4/4
PTRN ADD (PP) 4/4
TYLE 4/4
MOSAIC-EN 4/4
DUST-EN 4/4
M-INIT 3/4
525/625 4/4
TIMMING 2/4
TIMMING 3/4
TIMMING 4/4
CS-BAS 2/4
SERIAL-BAS 2/4
CS-MOSAIC 3/4
CS-MOSAIC 4/4
SERIAL-MOSAIC 3/4
SERIAL-MOSAIC 4/4
CK 4/4
CK7 3/4
CK 2/4
CK (INV) 3/4
CK (INV) 2/4
CK-FAST 3/4
CK (27M) 2/4

*C1 0.1
*C2 0.1
*C3 0.1
*C4 0.1
*C5 0.1
*C6 0.1
*C7 0.1
*C8 0.1
*C9 0.1
*C10 0.1
*C11 0.1
*C12 0.1
*C14 0.1
*C15 0.1
*C16 0.1
*C17 0.1
*C18 0.1
*C19 0.1
*C200 0.1
*C201 0.1
*C202 0.1
*C203 0.1
*C204 0.1
*C205 0.1
*C206 0.1
*C207 0.1
*C208 0.1
*C209 0.1
*C210 0.1
*C211 0.1
*C212 0.1
*C213 0.1
*C214 0.1
*C215 0.1
*C216 0.1
*C217 0.1
*C300 0.1
*C301 0.1
*C302 0.1
*C303 0.1
*C304 0.1
*C305 0.1
*C306 0.1
*C307 0.1
*C308 0.1
*C309 0.1
*C310 0.1
*C311 0.1
*C312 0.1
*C313 0.1
*C315 0.1
*C316 0.1
*C317 0.1
*C400 0.1
*C401 0.1
*C402 0.1
*C403 0.1
*C404 0.1
*C405 0.1
*C406 0.1
*C407 0.1
*C408 0.1
*C409 0.1
*C410 0.1
*C411 0.1
*C412 0.1
*C413 0.1
*C414 0.1
*C415 0.1
*C416 0.1
*C417 0.1
*C418 0.1
*C419 0.1
*C420 0.1
*C421 0.1
*C422 0.1
*C423 0.1
*C428 0.1
*C429 0.1
*C430 0.1
*C431 0.1
*C432 0.1
*C433 0.1
*C434 0.1
*C435 0.1
*C436 0.1
*C437 0.1
*C438 0.1
*C439 0.1
*C440 0.1
*C441 0.1
*C442 0.1
*C443 0.1
*C444 0.1
*C445 0.1
*C446 0.1
*C447 0.1
*C448 0.1
*C449 0.1
*C450 0.1
*C451 0.1
*C452 0.1
*C453 0.1
*C454 0.1

WKG-5 (1/4)
1-636-509-12, 13
DVS-8000
DVS-8000C

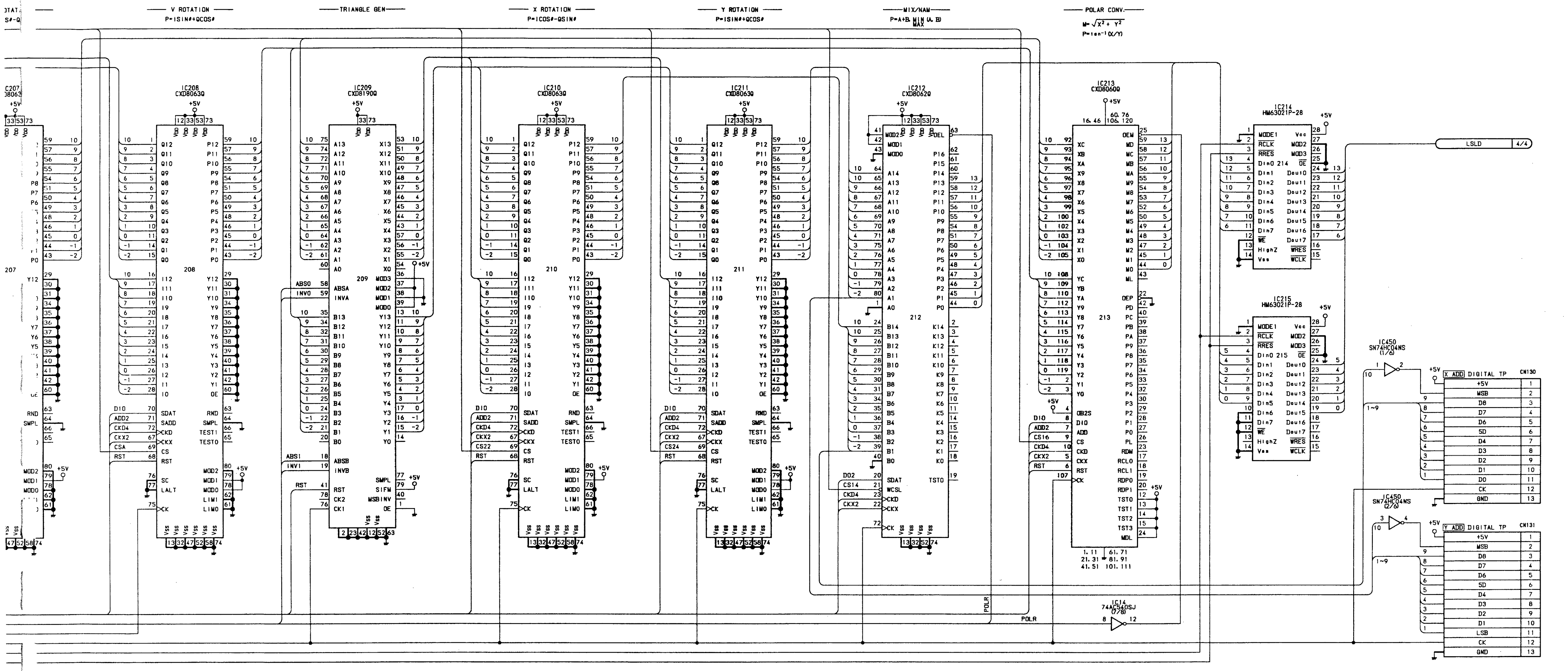
WKG-5 (2/4) ENHANCED WIPE BOARD

S/N; 10001 through 10030

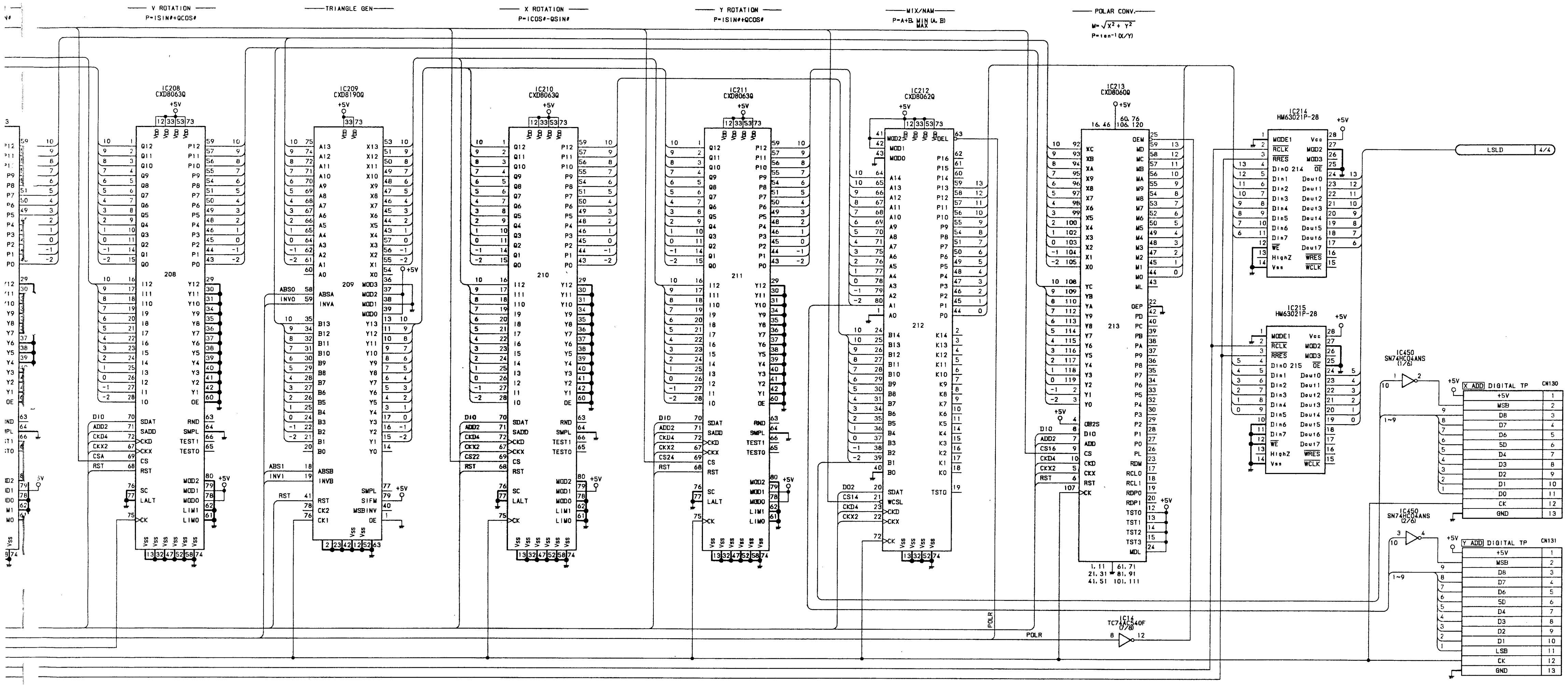

1/4 CS-BAS
CS
CS4
SIN ROM
IC200 WS57C45-35T
IC201 WS57C45-35T
MOD GAIN
IC202 CXD8062Q
H/V MOD CONTROL
IC203 CXD8053Q
V MOD DATA
H MOD DATA
H-SAWTOOTH GEN
IC204 CXD8059Q
H SAWTOOTH INVERTER
IC205 CXD8190Q
V SAWTOOTH GEN
IC206 CXD8059Q
H ROTATION P=ICOS#-QSIN#
IC207 CXD8063Q
V ROTATION P=ISIN#+QCO
IC208 CXD8063Q
H SAWTOOTH
V SAWTOOTH
+5V
1/4 TIMMING
1/4 SERIAL-BAS
1/4 FUNC-CNT
CK5
CK6
1/4 CK
1/4 CK (INV)
1/4 DELAY ADJUST
TIMMING
SERIAL CTL
FUNCTION CTL
CK5
CK6

9-57 (a)

9-58 (a)


V ROTATION
P=ISINθ+QCOSθ
TRIANGLE GEN
X ROTATION
P=ICOSθ-QSINθ
Y ROTATION
P=ISINθ+QCOSθ
MIX/NAM
P=A+B, MIN (A, B) MAX
POLAR CONV.
M=$\sqrt{X^2+Y^2}$
P=tan⁻¹(X/Y)
IC208 CXD8063Q
IC209 CXD8190Q
IC210 CXD8063Q
IC211 CXD8063Q
IC212 CXD8062Q
IC213 CXD8060Q
IC214 HM63021P-28
IC215 HM63021P-28
IC450 SN74HC04NS (1/6)
IC450 SN74HC04NS (2/6)
IC14 74AC540SJ (7/8)
LSLD 4/4
POLR
+5V
Y ADD DIGITAL TP CN130
Y ADD DIGITAL TP CN131
+5V
MSB
D8
D7
D6
D5
D4
D3
D2
D1
D0
LSB
CK
GND

WKG-5 (2/4)
1-636-509-11
DVS-8000


V ROTATION
P=ISIN#+QCOS#
TRIANGLE GEN
X ROTATION
P=ICOS#-QSIN#
Y ROTATION
P=ISIN#+QCOS#
MIX/NAM
P=A+B, MIN (A, B) MAX
POLAR CONV.
M=√X²+Y²
P=tan⁻¹(X/Y)
IC208 CXD8063Q
IC209 CXD8190Q
IC210 CXD8063Q
IC211 CXD8063Q
IC212 CXD8062Q
IC213 CXD8060Q
IC214 HM63021P-28
IC215 HM63021P-28
IC450 SN74HC04ANS (1/6)
IC450 SN74HC04ANS (2/6)
IC14 TC74AC540F (7/8)
LSLD 4/4
X ADD DIGITAL TP CN130
Y ADD DIGITAL TP CN131
POLR
+5V

WKG-5 (2/4)

1-636-509-12, 13
DVS-8000
DVS-8000C

WKG-5 ENHANCED WIPE BOARD

S/N: 10031 and higher

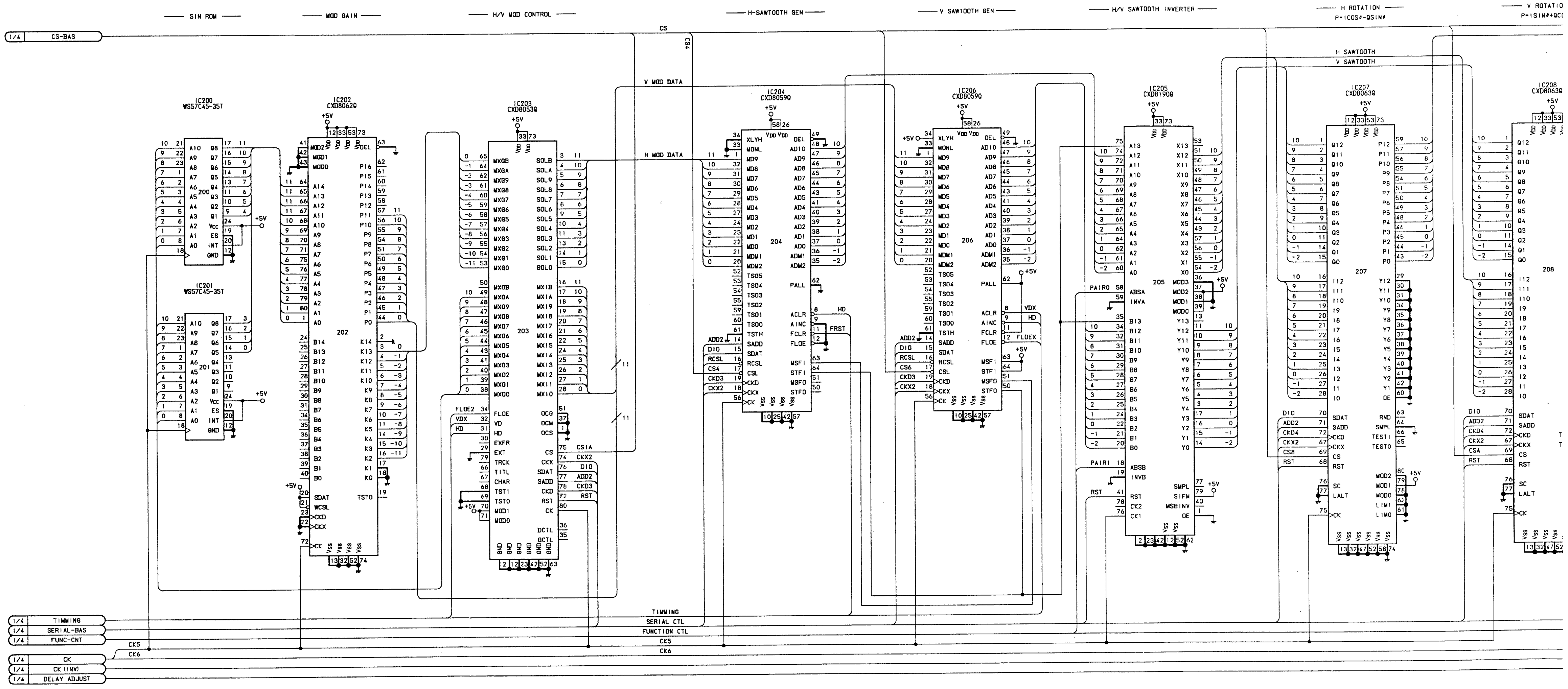
1

2

3

4

5


SIN ROM
MOD GAIN
H/V MOD CONTROL
H-SAWTOOTH GEN
V SAWTOOTH GEN
H/V SAWTOOTH INVERTER
H ROTATION
P=ICOS#-QSIN#
V ROTATIO
1/4 CS-BAS
CS
V MOD DATA
H MOD DATA
H SAWTOOTH
V SAWTOOTH
IC200
WS57C45-35T
IC201
WS57C45-35T
IC202
CXD8062Q
IC203
CXD8053Q
IC204
CXD8059Q
IC206
CXD8059Q
IC205
CXD8190Q
IC207
CXD8063Q
IC208
CXD8063Q
+5V
1/4 TIMING
1/4 SERIAL-BAS
1/4 FUNC-CNT
1/4 CK
1/4 CK (INV)
1/4 DELAY ADJUST
TIMING
SERIAL CTL
FUNCTION CTL
CK5
CK6

B-SYX121-WKG5-13#2

A | B | C | D | E | F | G | H

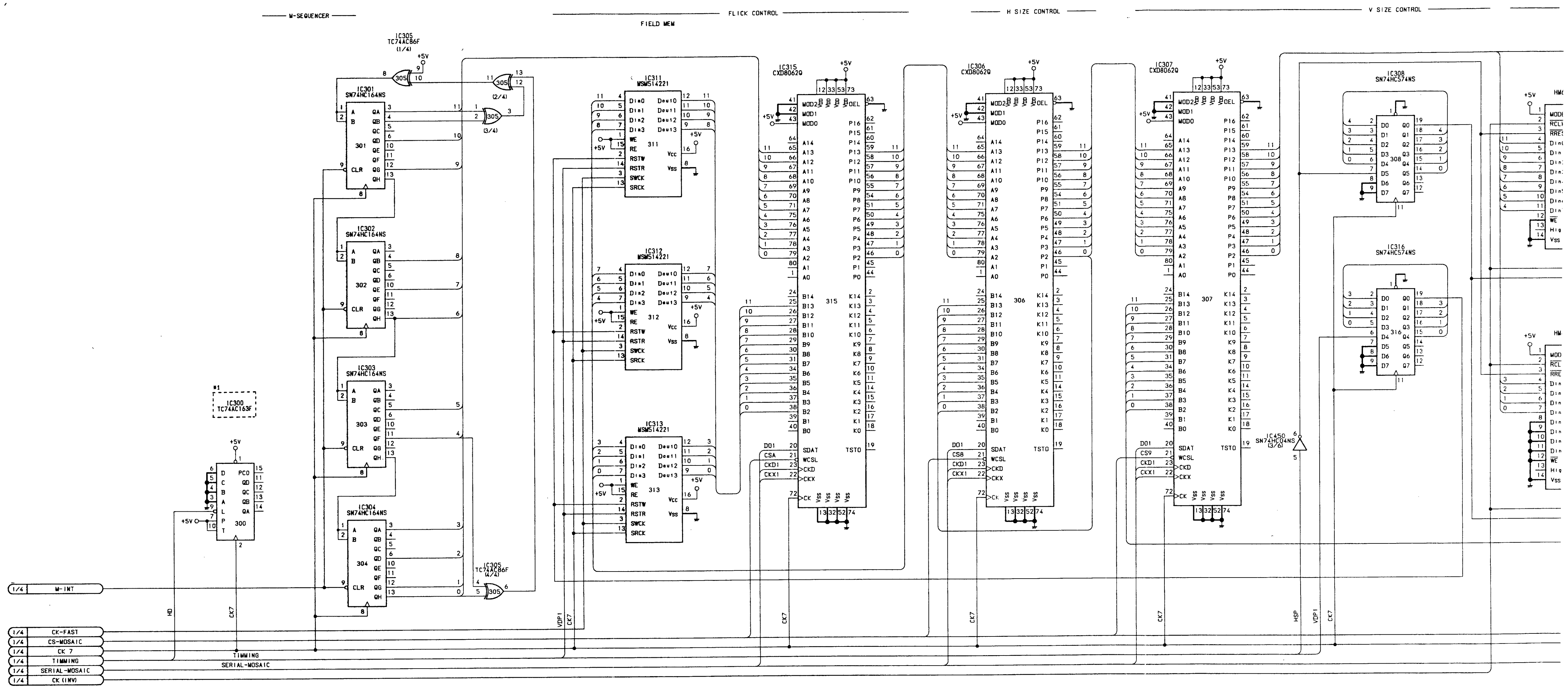
WKG-5 (3/4) ENHANCED WIPE BOARD

S/N; 10001 through 10060

1

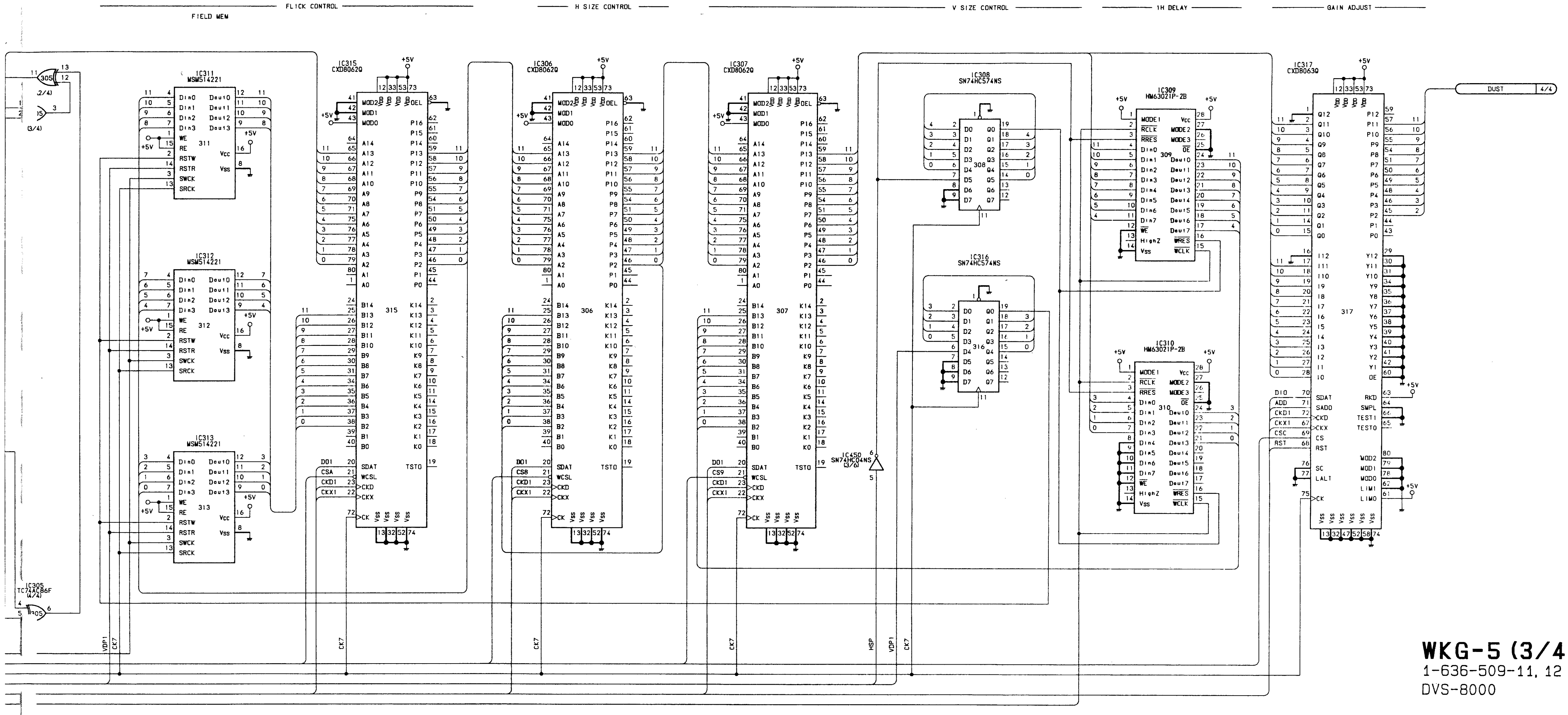
2

3


M-SEQUENCER
FIELD MEM
FLICK CONTROL
H SIZE CONTROL
V SIZE CONTROL
IC305 TC74AC86F (1/4)
IC305 (2/4)
IC305 (3/4)
IC305 TC74AC86F (4/4)
IC301 SN74HC164NS
IC302 SN74HC164NS
IC303 SN74HC164NS
IC304 SN74HC164NS
*1 IC300 TC74AC163F
IC311 MSM514221
IC312 MSM514221
IC313 MSM514221
IC315 CXD8062Q
IC306 CXD8062Q
IC307 CXD8062Q
IC308 SN74HC574NS
IC316 SN74HC574NS
IC450 SN74HC04NS (3/6)
+5V
M-INT
CK-FAST
CS-MOSAIC
CK 7
TIMMING
SERIAL-MOSAIC
CK (INV)
HD
CK7
VDP1
HSP
DO1
CSA
CS8
CS9
CKD1
CKX1

Note: *1-----(-12) board is "SN74HC163ANS".

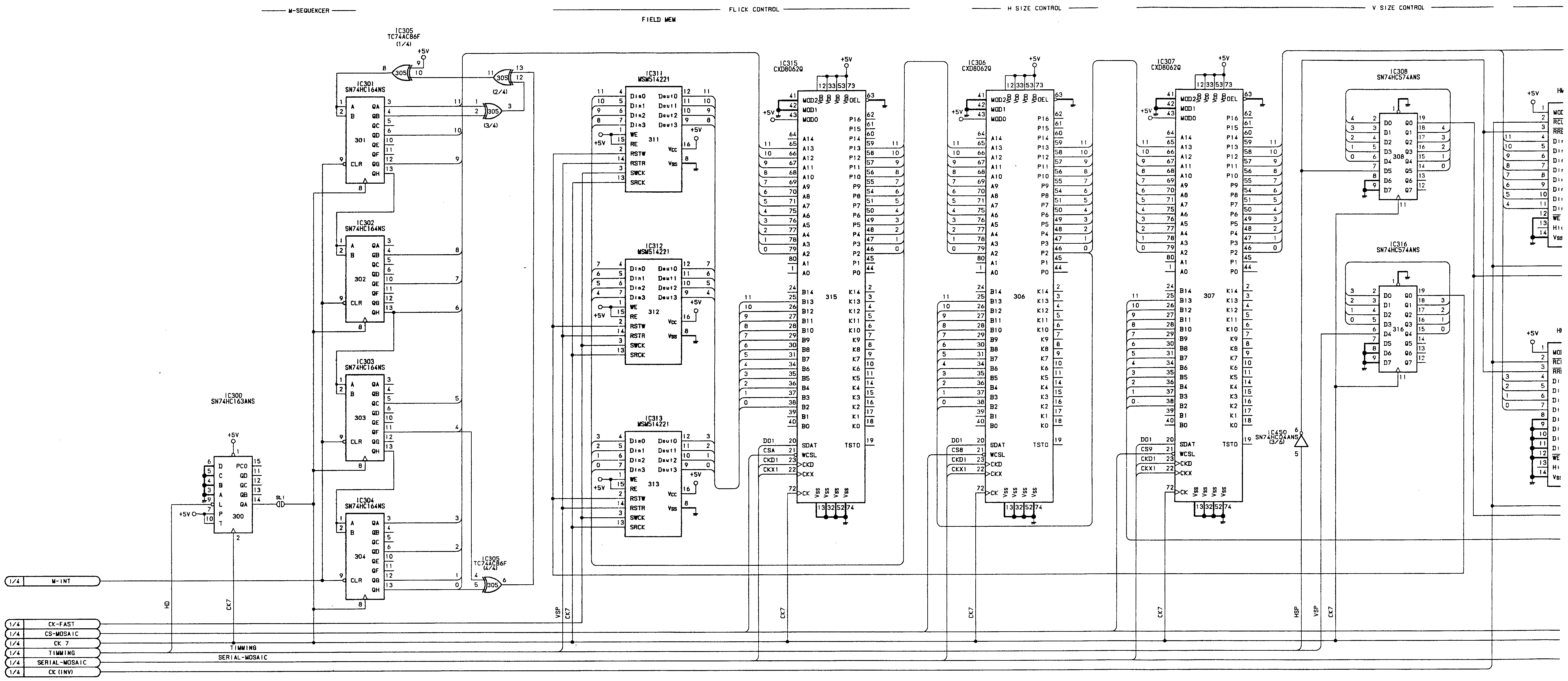
A | B | C | D | E | F | G | H

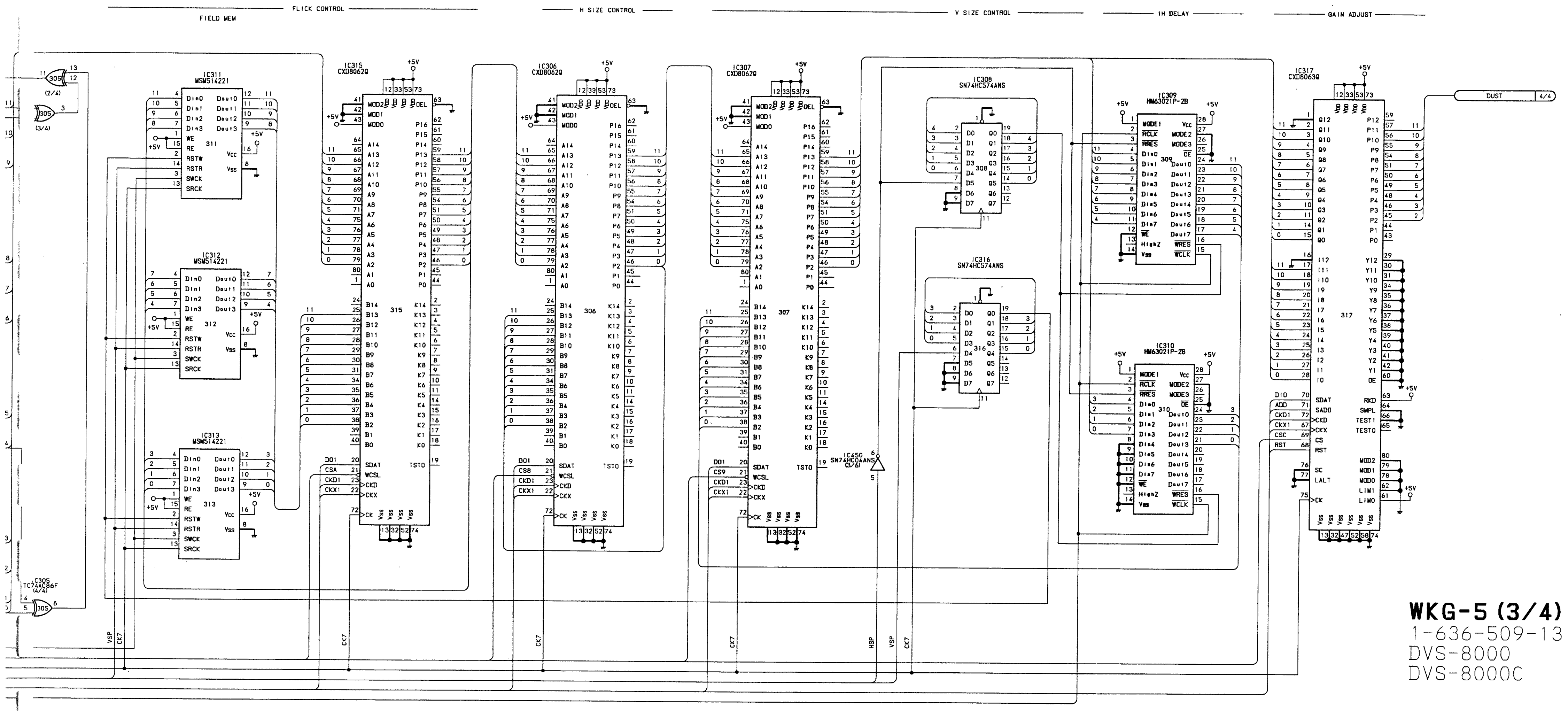

FLICK CONTROL
FIELD MEM
H SIZE CONTROL
V SIZE CONTROL
1H DELAY
GAIN ADJUST
IC311 MSM514221
IC312 MSM514221
IC313 MSM514221
IC315 CXD8062Q
IC306 CXD8062Q
IC307 CXD8062Q
IC308 SN74HC574NS
IC316 SN74HC574NS
IC309 HM63021P-28
IC310 HM63021P-28
IC317 CXD8063Q
IC305 TC74AC86F
IC450 SN74HC04NS
DUST
+5V
VDP1
CK7
HSP

WKG-5 (3/4)
1-636-509-11, 12
DVS-8000

WKG-5 ENHANCED WIPE BOARD

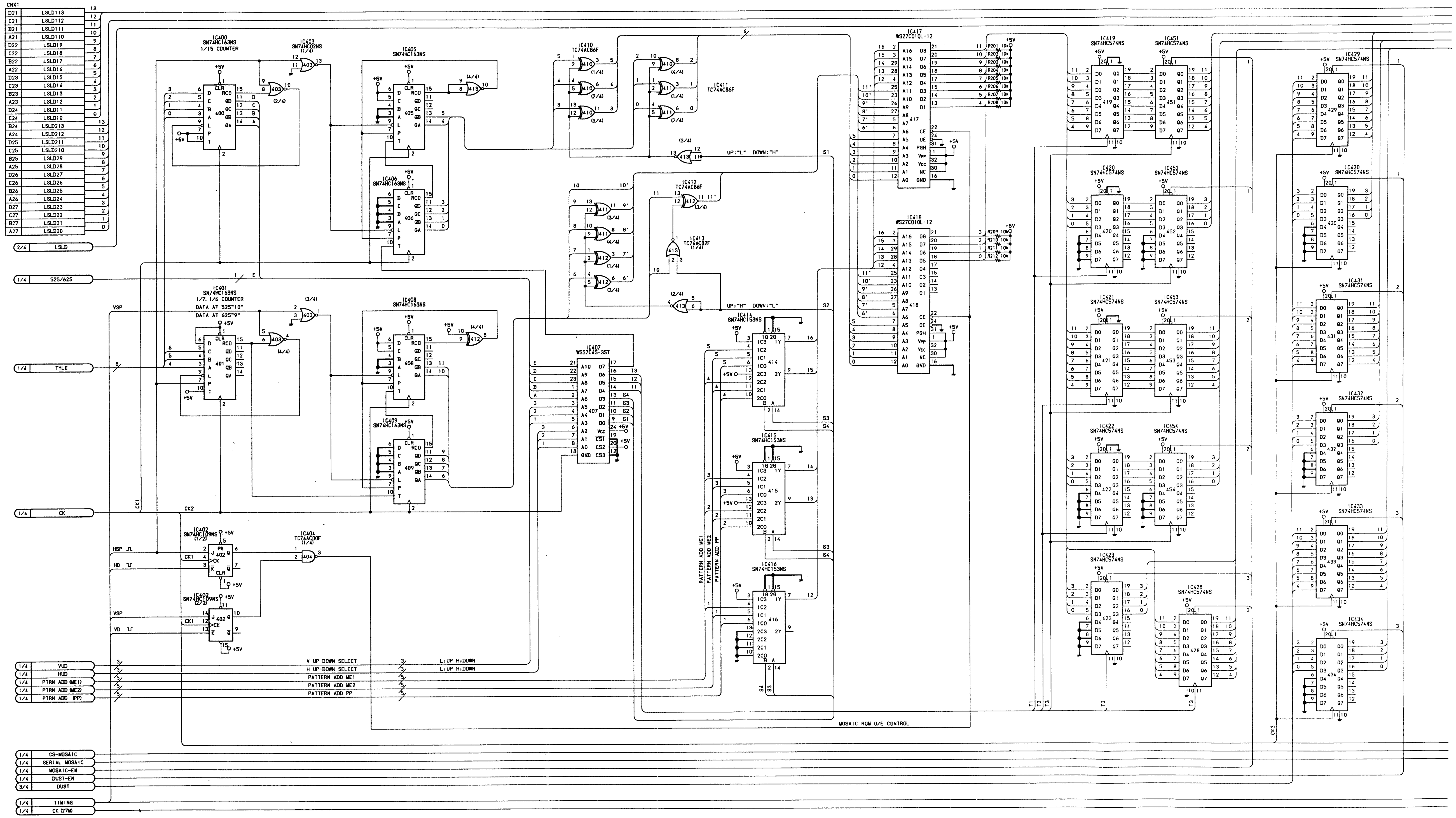
S/N; 10061 and higher

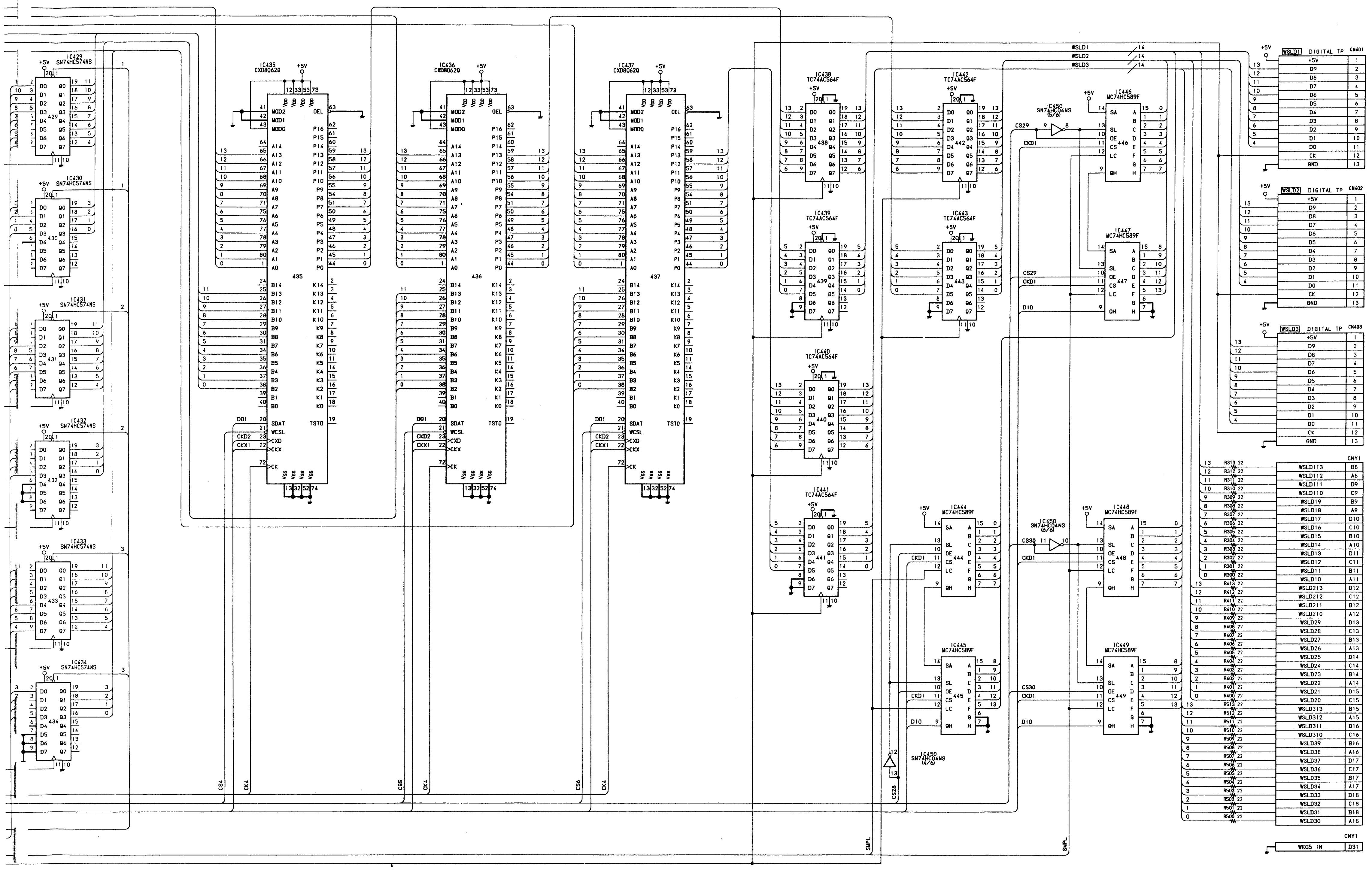

M-SEQUENCER
FIELD MEM
FLICK CONTROL
H SIZE CONTROL
V SIZE CONTROL
IC305 TC74AC86F (1/4)
IC305 (2/4)
IC305 (3/4)
IC305 TC74AC86F (4/4)
IC301 SN74HC164NS
IC302 SN74HC164NS
IC303 SN74HC164NS
IC304 SN74HC164NS
IC300 SN74HC163ANS
IC311 MSM514221
IC312 MSM514221
IC313 MSM514221
IC315 CXD8062Q
IC306 CXD8062Q
IC307 CXD8062Q
IC308 SN74HC574ANS
IC316 SN74HC574ANS
IC450 SN74HC04ANS (3/6)
SL1
+5V
HD
CK7
VSP
HSP
TIMMING
SERIAL-MOSAIC
1/4 M-INT
1/4 CK-FAST
1/4 CS-MOSAIC
1/4 CK 7
1/4 TIMMING
1/4 SERIAL-MOSAIC
1/4 CK (INV)


FLICK CONTROL
FIELD MEM
H SIZE CONTROL
V SIZE CONTROL
1H DELAY
GAIN ADJUST
IC311 MSM514221
IC312 MSM514221
IC313 MSM514221
IC315 CXD8062Q
IC306 CXD8062Q
IC307 CXD8062Q
IC308 SN74HC574ANS
IC316 SN74HC574ANS
IC309 HM63021P-28
IC310 HM63021P-28
IC317 CXD8063Q
IC305 TC74HC86F (4/4)
IC450 SN74HC04ANS (3/6)
305 (2/4)
305 (3/4)
DUST 4/4
+5V
VSP
CK7
HSP

WKG-5 (3/4)
1-636-509-13
DVS-8000
DVS-8000C

WKG-5 (4/4) ENHANCED WIPE BOARD


CNX1
LSLD113
LSLD112
LSLD111
LSLD110
LSLD19
LSLD18
LSLD17
LSLD16
LSLD15
LSLD14
LSLD13
LSLD12
LSLD11
LSLD10
LSLD213
LSLD212
LSLD211
LSLD210
LSLD29
LSLD28
LSLD27
LSLD26
LSLD25
LSLD24
LSLD23
LSLD22
LSLD21
LSLD20
LSLD
525/625
TYLE
CK
VUD
HUD
PTRN ADD ME1
PTRN ADD ME2
PTRN ADD PP
CS-MOSAIC
SERIAL MOSAIC
MOSAIC-EN
DUST-EN
DUST
TIMING
CK (27M)
IC400 SN74HC163NS 1/15 COUNTER
IC401 SN74HC163NS 1/7, 1/6 COUNTER
DATA AT 525"10"
DATA AT 625"9"
IC402 SN74HC109NS (1/2)
IC402 SN74HC109NS (2/2)
IC403 SN74HC02NS (1/4)
IC404 TC74AC00F (1/4)
IC405 SN74HC163NS
IC406 SN74HC163NS
IC408 SN74HC163NS
IC409 SN74HC163NS
IC407 WS57C45-35T
IC410 TC74AC86F
IC411 TC74AC86F
IC412 TC74AC86F
IC413 TC74AC02F
IC414 SN74HC153NS
IC415 SN74HC153NS
IC416 SN74HC153NS
IC417 WS27C010L-12
IC418 WS27C010L-12
IC419 SN74HC574NS
IC420 SN74HC574NS
IC421 SN74HC574NS
IC422 SN74HC574NS
IC423 SN74HC574NS
IC428 SN74HC574NS
IC429 SN74HC574NS
IC430 SN74HC574NS
IC431 SN74HC574NS
IC432 SN74HC574NS
IC433 SN74HC574NS
IC434 SN74HC574NS
IC451 SN74HC574NS
IC452 SN74HC574NS
IC453 SN74HC574NS
IC454 SN74HC574NS
UP:"L" DOWN:"H"
UP:"H" DOWN:"L"
VSP
HSP
HD
VD
CK1
CK2
V UP-DOWN SELECT
H UP-DOWN SELECT
PATTERN ADD ME1
PATTERN ADD ME2
PATTERN ADD PP
L:UP H:DOWN
MOSAIC ROM O/E CONTROL
+5V

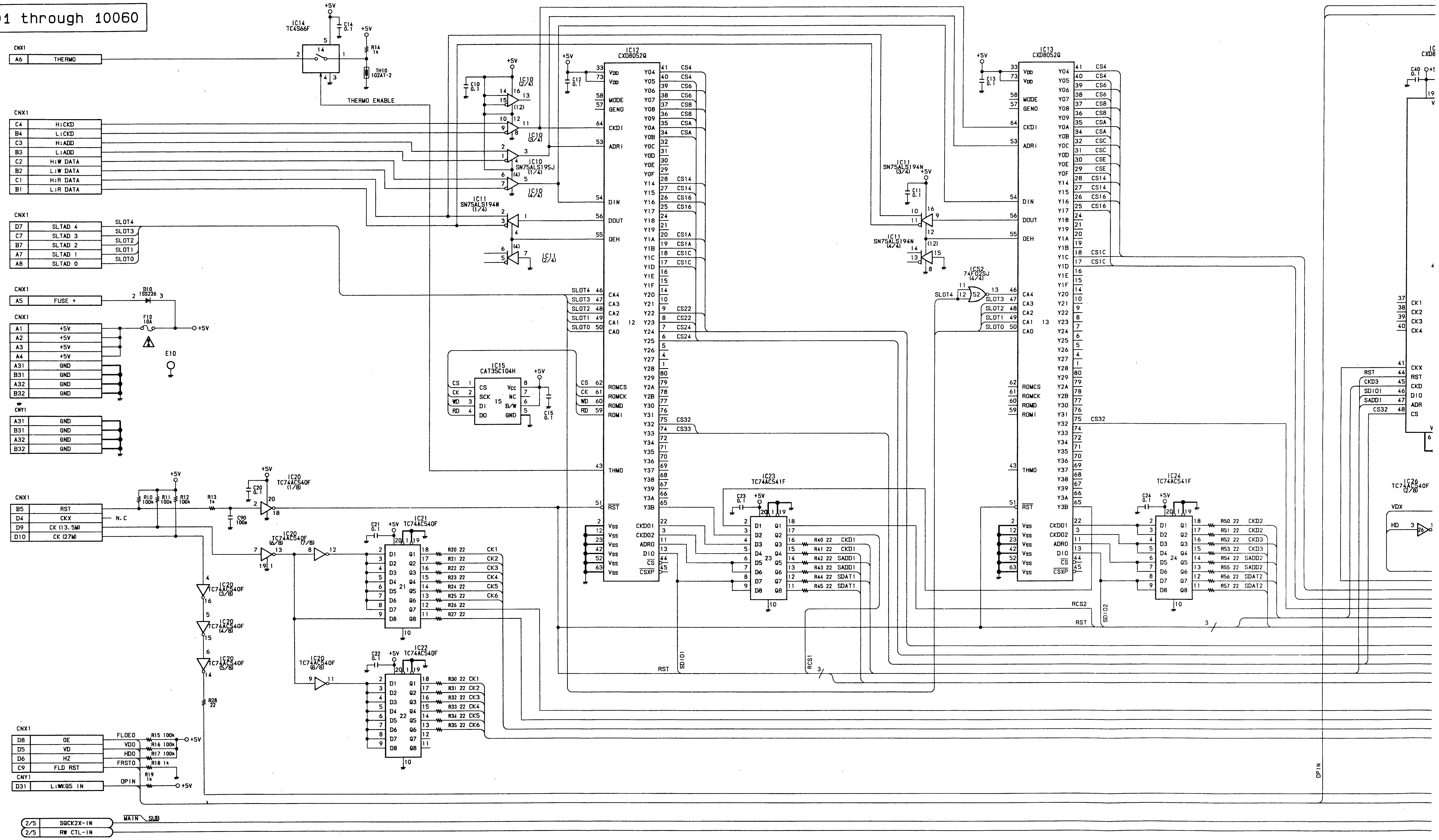

IC429 SN74HC574NS
IC430 SN74HC574NS
IC431 SN74HC574NS
IC432 SN74HC574NS
IC433 SN74HC574NS
IC434 SN74HC574NS
IC435 CXD8062Q
IC436 CXD8062Q
IC437 CXD8062Q
IC438 TC74AC564F
IC439 TC74AC564F
IC440 TC74AC564F
IC441 TC74AC564F
IC442 TC74AC564F
IC443 TC74AC564F
IC444 MC74HC589F
IC445 MC74HC589F
IC446 MC74HC589F
IC447 MC74HC589F
IC448 MC74HC589F
IC449 MC74HC589F
IC450 SN74HC04NS
WSLD1
WSLD2
WSLD3
DIGITAL TP CN401
DIGITAL TP CN402
DIGITAL TP CN403
CNY1
WKG5 IN
+5V
GND
CS29
CS30
CS28
CKD1
D10
SWPL

WKG-5 (4/4)
1-636-509-11, 12, 13
DVS-8000

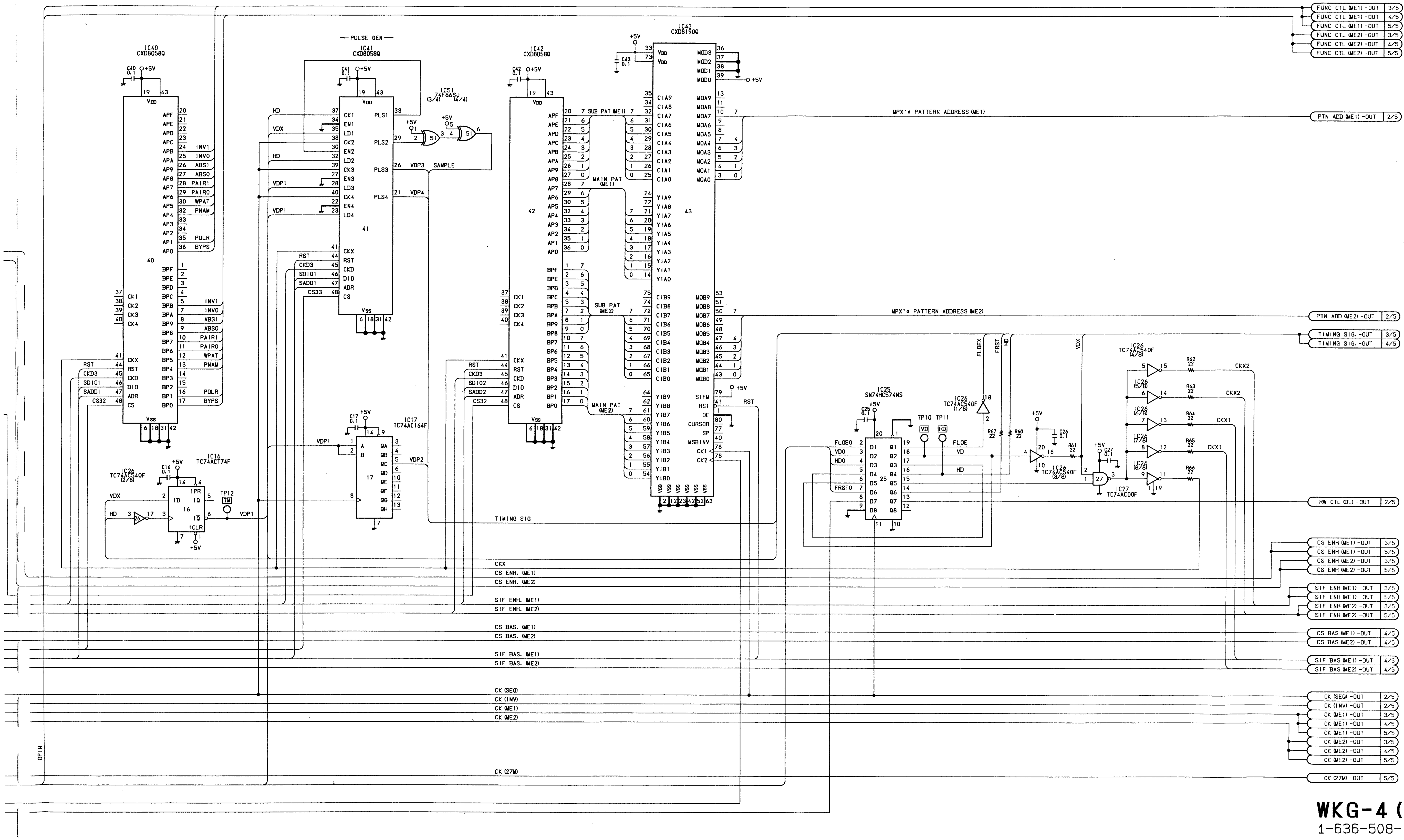
I J K L M N O P

WKG-4 (1/5) BASIC WIPE BOARD

S/N: 10001 through 10060


CNX1
A6 THERMO
IC14 TC4S66F
R14 1k
TH10 102AT-2
THERMO ENABLE
C4 H:CKD
B4 L:CKD
C3 H:ADD
B3 L:ADD
C2 H:W DATA
B2 L:W DATA
C1 H:R DATA
B1 L:R DATA
IC10 SN75ALS195J
IC11 SN75ALS194N
D7 SLTAD 4
C7 SLTAD 3
B7 SLTAD 2
A7 SLTAD 1
A8 SLTAD 0
SLOT4
SLOT3
SLOT2
SLOT1
SLOT0
A5 FUSE +
D10 1SS226
F10 10A
+5V
E10
GND
CNY1
IC15 CAT35C104H
IC12 CXD8052Q
IC13 CXD8052Q
CKDI
ADRI
DIN
DOUT
OEH
ROMCS
ROMCK
ROMD
ROMI
THMO
RST
CKDO1
CKDO2
ADRO
DIO
CS
CSXP
CS4
CS6
CS8
CSA
CSC
CSE
CS14
CS16
CS1A
CS1C
CS22
CS24
CS32
CS33
IC52 74F02SJ
B5 RST
D4 CKX
D9 CK (13.5M)
D10 CK (27M)
N.C
R10 100k
R11 100k
R12 100k
R13 1k
C90 100p
IC20 TC74AC540F
IC21 TC74AC540F
IC22 TC74AC540F
IC23 TC74AC541F
IC24 TC74AC541F
IC26 TC74AC540F
CK1
CK2
CK3
CK4
CK5
CK6
CKD1
CKD2
CKD3
SADD1
SADD2
SDAT1
SDAT2
SDIO1
SDIO2
RCS1
RCS2
R28 22
D8 OE
D5 VD
D6 HZ
C9 FLD RST
FLOEO
VDO
HDO
FRSTO
R15 100k
R16 100k
R17 100k
R18 1k
R19 1k
D31 L:WKG5 IN
OPIN
2/5 SQCK2X-IN
2/5 RW CTL-IN
MAIN
SUB
VDX
HD

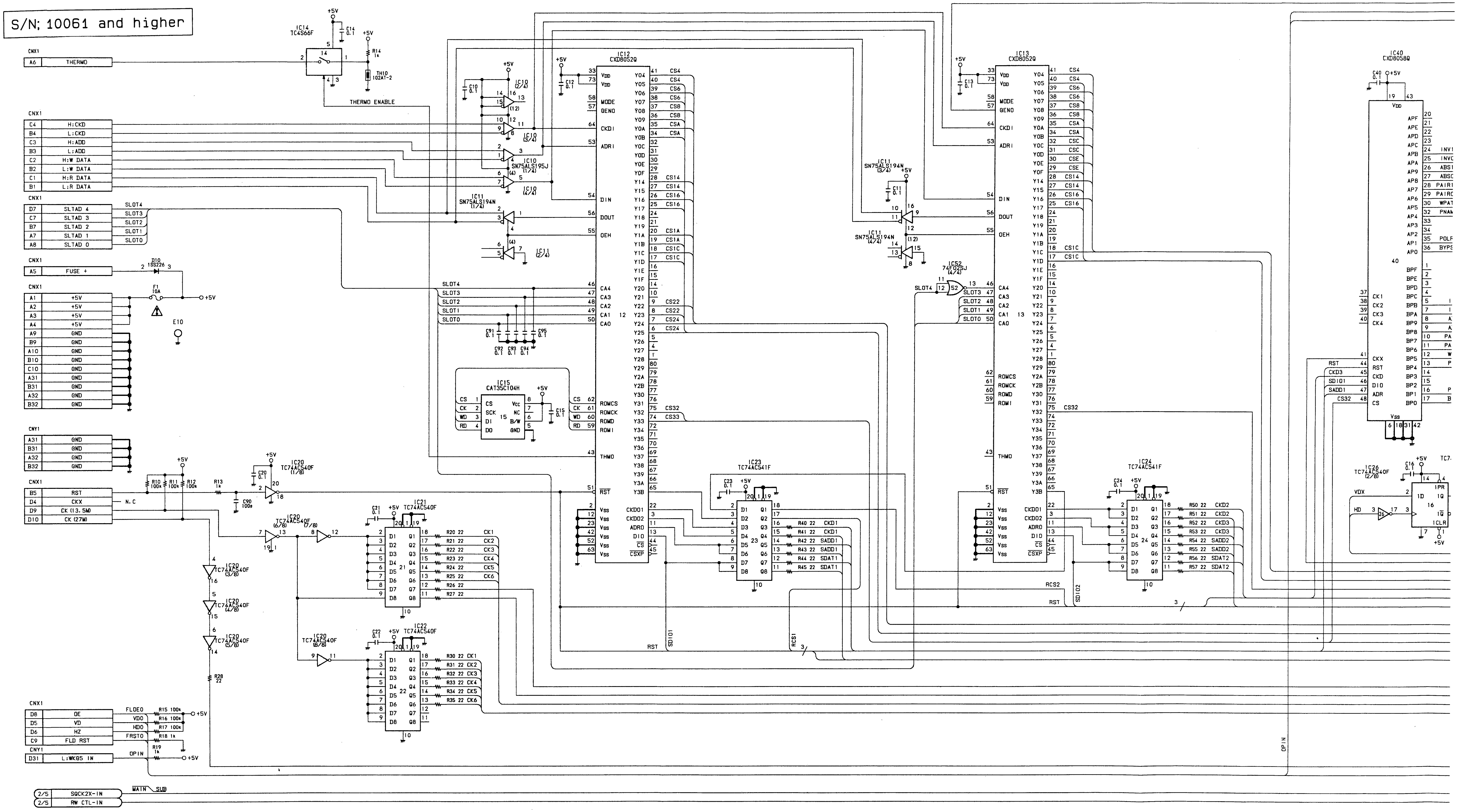
A B C D E F G H

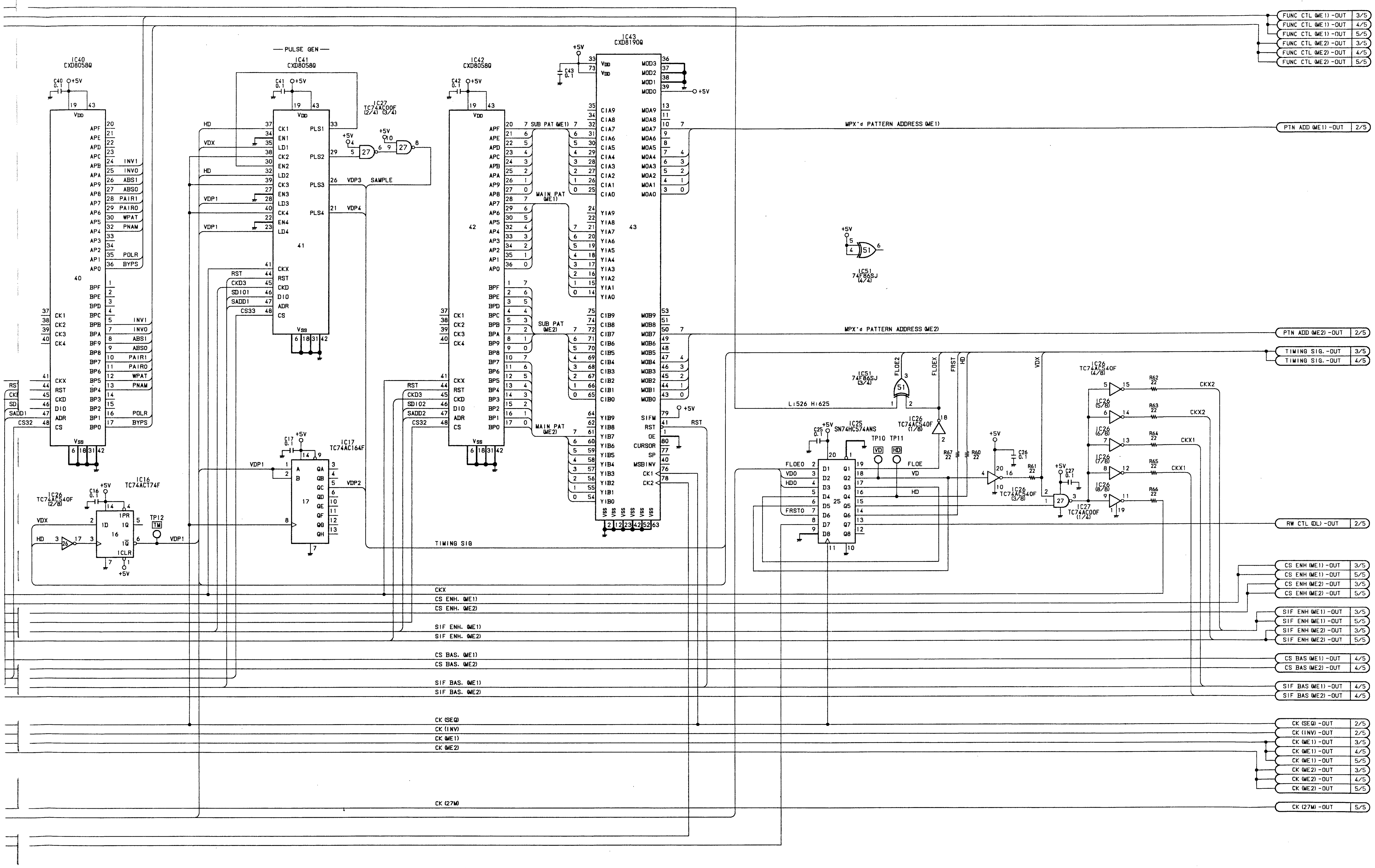

IC40
CXD8058Q
C40 0.1
+5V
VDD
APF
APE
APD
APC
APB
APA
AP9
AP8
AP7
AP6
AP5
AP4
AP3
AP2
AP1
AP0
BPF
BPE
BPD
BPC
BPB
BPA
BP9
BP8
BP7
BP6
BP5
BP4
BP3
BP2
BP1
BP0
CK1
CK2
CK3
CK4
CKX
RST
CKD
DIO
ADR
CS
VSS
INV1
INV0
ABS1
ABS0
PAIR1
PAIR0
WPAT
PNAM
POLR
BYPS
CKD3
SDI01
SADD1
CS32
PULSE GEN
IC41
CXD8058Q
C41 0.1
CK1
EN1
LD1
CK2
EN2
LD2
CK3
EN3
LD3
CK4
EN4
LD4
CKX
RST
CKD
DIO
ADR
CS
PLS1
PLS2
PLS3
PLS4
HD
VDX
VDP1
VDP3
VDP4
SAMPLE
CKD3
SDI01
SADD1
CS33
IC51
74F86SJ
(3/4) (4/4)
IC42
CXD8058Q
C42 0.1
SUB PAT (ME1)
MAIN PAT (ME1)
SUB PAT (ME2)
MAIN PAT (ME2)
SDI02
SADD2
IC43
CXD8190Q
C43 0.1
MOD3
MOD2
MOD1
MOD0
CIA9
CIA8
CIA7
CIA6
CIA5
CIA4
CIA3
CIA2
CIA1
CIA0
MOA9
MOA8
MOA7
MOA6
MOA5
MOA4
MOA3
MOA2
MOA1
MOA0
YIA9
YIA8
YIA7
YIA6
YIA5
YIA4
YIA3
YIA2
YIA1
YIA0
CIB9
CIB8
CIB7
CIB6
CIB5
CIB4
CIB3
CIB2
CIB1
CIB0
MOB9
MOB8
MOB7
MOB6
MOB5
MOB4
MOB3
MOB2
MOB1
MOB0
YIB9
YIB8
YIB7
YIB6
YIB5
YIB4
YIB3
YIB2
YIB1
YIB0
SIFM
RST
OE
CURSOR
SP
MSBINV
CK1
CK2
MPX'd PATTERN ADDRESS (ME1)
MPX'd PATTERN ADDRESS (ME2)
IC17
TC74AC164F
C17 0.1
VDP2
IC16
TC74ACT74F
C16 0.1
IC26
TC74AC540F
(2/8)
TP12
TM
VDX
HD
1PR
1D
1Q
1CLR
TIMING SIG
IC25
SN74HC574NS
C25 0.1
FLDEO
VDO
HDO
FRSTO
TP10 VD
TP11 HD
FLDE
VD
HD
FLDEX
FRST
VDX
IC26
TC74AC540F
(1/8)
(3/8)
(4/8)
(5/8)
(6/8)
(7/8)
(8/8)
C26 0.1
C27 0.1
R67 22
R60 22
R61 22
R62 22
R63 22
R64 22
R65 22
R66 22
IC27
TC74AC00F
CKX2
CKX1
CKX
CS ENH. (ME1)
CS ENH. (ME2)
SIF ENH. (ME1)
SIF ENH. (ME2)
CS BAS. (ME1)
CS BAS. (ME2)
SIF BAS. (ME1)
SIF BAS. (ME2)
CK (SEQ)
CK (INV)
CK (ME1)
CK (ME2)
CK (27M)
OPIN
FUNC CTL (ME1) -OUT 3/5
FUNC CTL (ME1) -OUT 4/5
FUNC CTL (ME1) -OUT 5/5
FUNC CTL (ME2) -OUT 3/5
FUNC CTL (ME2) -OUT 4/5
FUNC CTL (ME2) -OUT 5/5
PTN ADD (ME1) -OUT 2/5
PTN ADD (ME2) -OUT 2/5
TIMING SIG. -OUT 3/5
TIMING SIG. -OUT 4/5
RW CTL (DL) -OUT 2/5
CS ENH (ME1) -OUT 3/5
CS ENH (ME1) -OUT 5/5
CS ENH (ME2) -OUT 3/5
CS ENH (ME2) -OUT 5/5
SIF ENH (ME1) -OUT 3/5
SIF ENH (ME1) -OUT 5/5
SIF ENH (ME2) -OUT 3/5
SIF ENH (ME2) -OUT 5/5
CS BAS (ME1) -OUT 4/5
CS BAS (ME2) -OUT 4/5
SIF BAS (ME1) -OUT 4/5
SIF BAS (ME2) -OUT 4/5
CK (SEQ) -OUT 2/5
CK (INV) -OUT 2/5
CK (ME1) -OUT 3/5
CK (ME1) -OUT 4/5
CK (ME1) -OUT 5/5
CK (ME2) -OUT 3/5
CK (ME2) -OUT 4/5
CK (ME2) -OUT 5/5
CK (27M) -OUT 5/5

WKG-4 (1/5)
1-636-508-11, 12
DVS-8000

WKG-4 BASIC WIPE BOARD

S/N; 10061 and higher

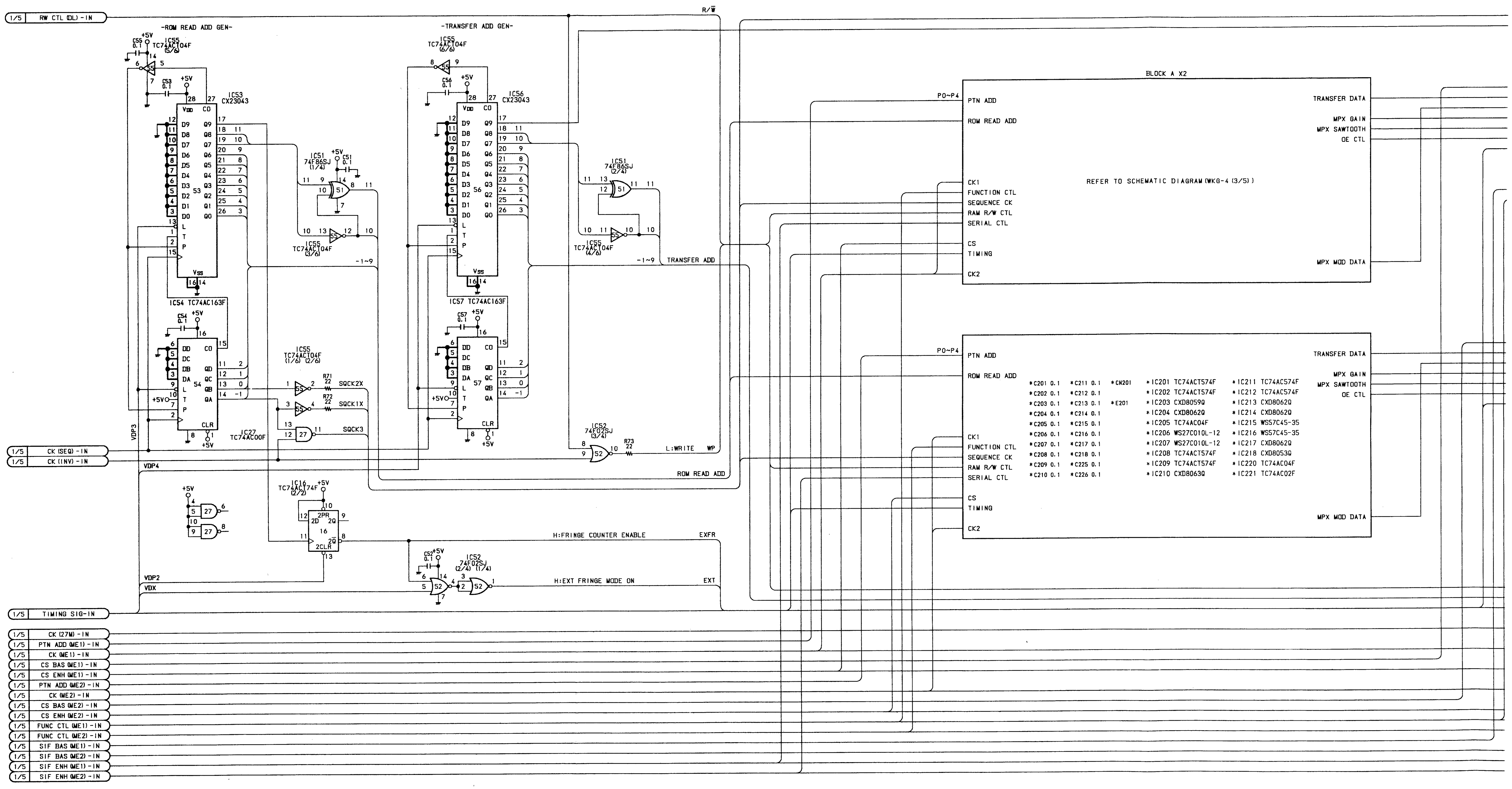

CNX1
A6 THERMO
IC14 TC4S66F
TH10 102AT-2
THERMO ENABLE
C4 H:CKD
B4 L:CKD
C3 H:ADD
B3 L:ADD
C2 H:W DATA
B2 L:W DATA
C1 H:R DATA
B1 L:R DATA
D7 SLTAD 4
C7 SLTAD 3
B7 SLTAD 2
A7 SLTAD 1
A8 SLTAD 0
SLOT4
SLOT3
SLOT2
SLOT1
SLOT0
A5 FUSE +
D10 1SS226
F1 10A
E10
A1 +5V
A2 +5V
A3 +5V
A4 +5V
A9 GND
B9 GND
A10 GND
B10 GND
C10 GND
A31 GND
B31 GND
A32 GND
B32 GND
CNY1
A31 GND
B31 GND
A32 GND
B32 GND
B5 RST
D4 CKX
D9 CK (13.5M)
D10 CK (27M)
N.C
IC10 SN75ALS195J
IC11 SN75ALS194N
IC12 CXD8052Q
IC13 CXD8052Q
IC15 CAT35C104H
IC20 TC74AC540F
IC21 TC74AC540F
IC22 TC74AC540F
IC23 TC74AC541F
IC24 TC74AC541F
IC26 TC74AC540F
IC40 CXD8058Q
IC52 74F02SJ
VDD
MODE
GEND
CKDI
ADRI
DIN
DOUT
OEH
CA4
CA3
CA2
CA1
CA0
ROMCS
ROMCK
ROMD
ROMI
THMO
RST
Vss
CKDO1
CKDO2
ADRO
DIO
CS
CSXP
CS4
CS6
CS8
CSA
CSC
CSE
CS14
CS16
CS1A
CS1C
CS22
CS24
CS32
CS33
CK1
CK2
CK3
CK4
CK5
CK6
CKD1
CKD2
CKD3
SADD1
SADD2
SDAT1
SDAT2
RCS1
RCS2
SDIO1
SDIO2
D8 OE
D5 VD
D6 HZ
C9 FLD RST
D31 L:WKG5 IN
FLDEO
VDO
HDO
FRSTO
OPIN
VDX
HD
2/5 SQCK2X-IN
2/5 RW CTL-IN
MAIN SUB


IC40
CXD8058Q
IC41
CXD8058Q
— PULSE GEN —
IC42
CXD8058Q
IC43
CXD8190Q
IC27
TC74AC00F
(2/4) (3/4)
IC17
TC74AC164F
IC16
TC74ACT74F
IC26
TC74ACS40F
(2/8)
IC25
SN74HC574ANS
IC51
74F86SJ
(4/4)
IC51
74F86SJ
(3/4)
IC26
TC74ACS40F
(1/8)
IC27
TC74AC00F
(1/4)
TP10
TP11
TP12
VD
HD
TM
MPX'd PATTERN ADDRESS (ME1)
MPX'd PATTERN ADDRESS (ME2)
SUB PAT (ME1)
MAIN PAT (ME1)
SUB PAT (ME2)
MAIN PAT (ME2)
L:526 H:625
FLOE2
FLOEX
FRST
HD
VDX
TIMING SIG
VDP1
VDP2
VDP3
VDP4
SAMPLE
CKX
CS ENH. (ME1)
CS ENH. (ME2)
SIF ENH. (ME1)
SIF ENH. (ME2)
CS BAS. (ME1)
CS BAS. (ME2)
SIF BAS. (ME1)
SIF BAS. (ME2)
CK (SEQ)
CK (INV)
CK (ME1)
CK (ME2)
CK (27M)
CKX2
CKX1
FUNC CTL (ME1) -OUT 3/5
FUNC CTL (ME1) -OUT 4/5
FUNC CTL (ME1) -OUT 5/5
FUNC CTL (ME2) -OUT 3/5
FUNC CTL (ME2) -OUT 4/5
FUNC CTL (ME2) -OUT 5/5
PTN ADD (ME1) -OUT 2/5
PTN ADD (ME2) -OUT 2/5
TIMING SIG. -OUT 3/5
TIMING SIG. -OUT 4/5
RW CTL (DL) -OUT 2/5
CS ENH (ME1) -OUT 3/5
CS ENH (ME1) -OUT 5/5
CS ENH (ME2) -OUT 3/5
CS ENH (ME2) -OUT 5/5
SIF ENH (ME1) -OUT 3/5
SIF ENH (ME1) -OUT 5/5
SIF ENH (ME2) -OUT 3/5
SIF ENH (ME2) -OUT 5/5
CS BAS (ME1) -OUT 4/5
CS BAS (ME2) -OUT 4/5
SIF BAS (ME1) -OUT 4/5
SIF BAS (ME2) -OUT 4/5
CK (SEQ) -OUT 2/5
CK (INV) -OUT 2/5
CK (ME1) -OUT 3/5
CK (ME1) -OUT 4/5
CK (ME1) -OUT 5/5
CK (ME2) -OUT 3/5
CK (ME2) -OUT 4/5
CK (ME2) -OUT 5/5
CK (27M) -OUT 5/5

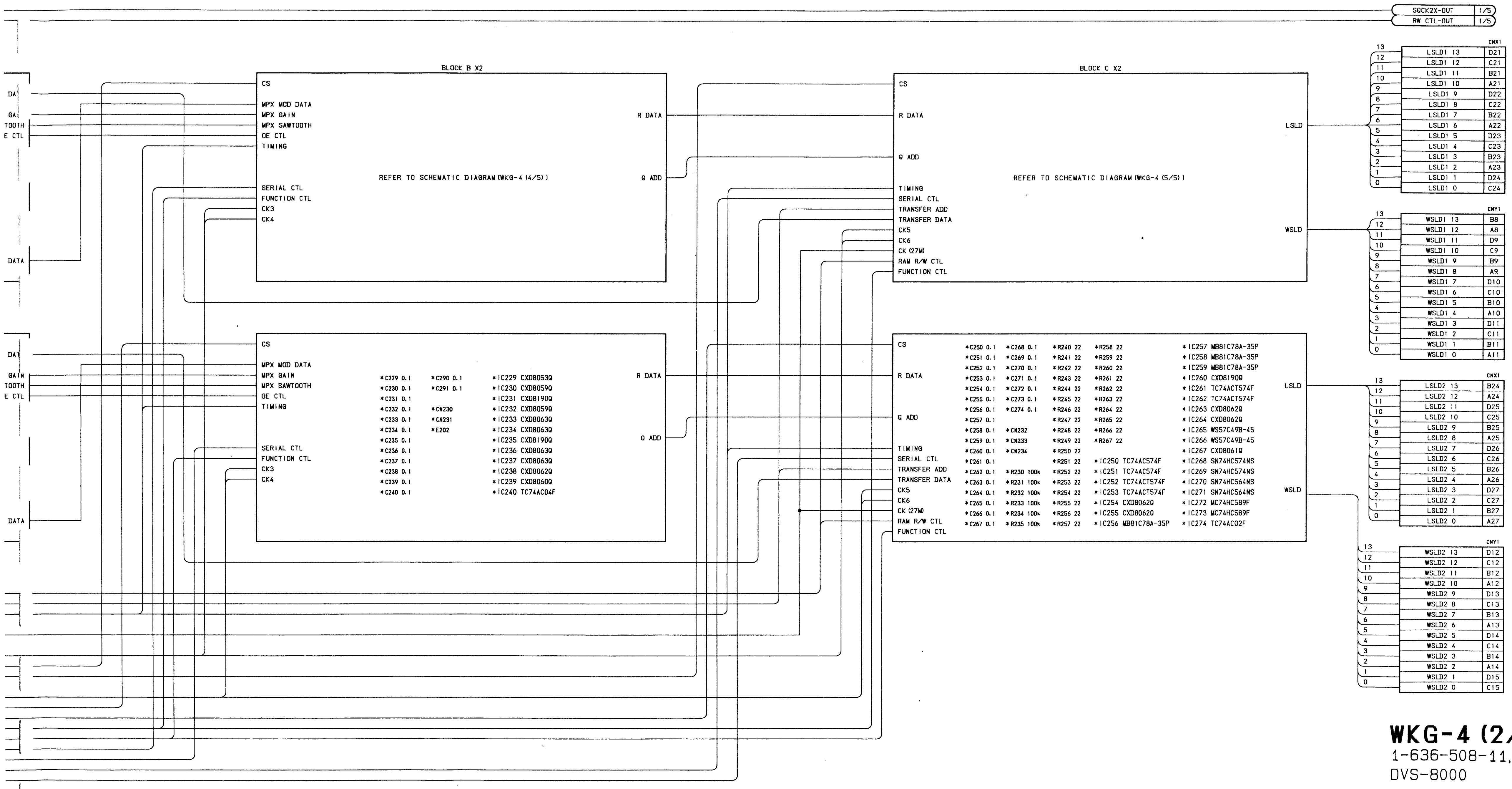
WKG-4 (1/5)
1-636-508-13
DVS-8000
DVS-8000C

WKG-4 (2/5) BASIC WIPE BOARD

1
2
3
4
5

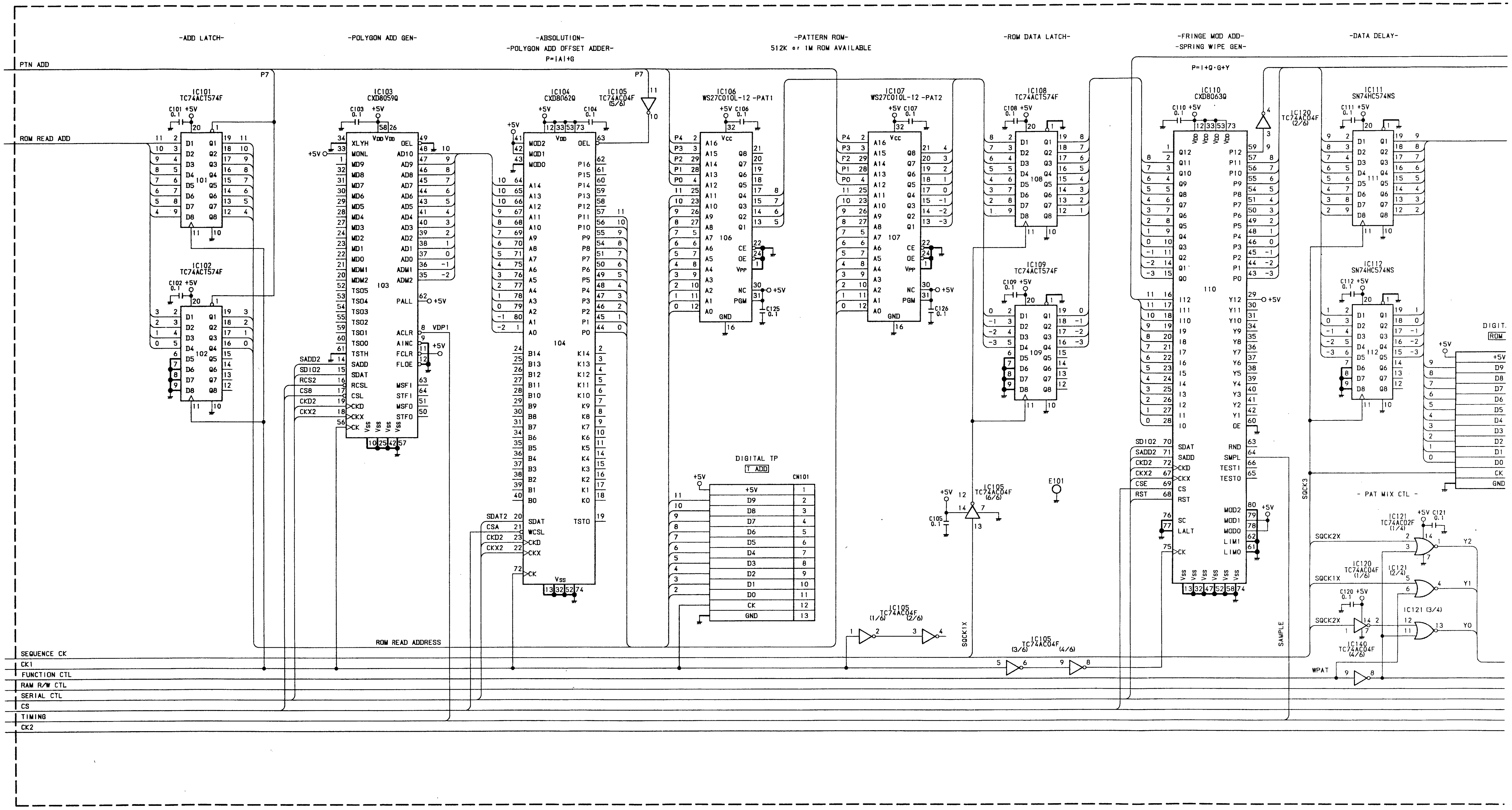

RW CTL (DL) -IN
R/W
-ROM READ ADD GEN-
-TRANSFER ADD GEN-
IC53 CX23043
IC56 CX23043
IC54 TC74AC163F
IC57 TC74AC163F
IC55 TC74ACT04F
IC51 74F86SJ
IC52 74F02SJ
IC27 TC74AC00F
IC16 TC74ACT74F
SQCK2X
SQCK1X
SQCK3
TRANSFER ADD
L:WRITE WP
ROM READ ADD
H:FRINGE COUNTER ENABLE EXFR
H:EXT FRINGE MODE ON EXT
VDP2
VDP3
VDP4
VDX
CK (SEQ) -IN
CK (INV) -IN
TIMING SIG-IN
CK (27M) -IN
PTN ADD (ME1) -IN
CK (ME1) -IN
CS BAS (ME1) -IN
CS ENH (ME1) -IN
PTN ADD (ME2) -IN
CK (ME2) -IN
CS BAS (ME2) -IN
CS ENH (ME2) -IN
FUNC CTL (ME1) -IN
FUNC CTL (ME2) -IN
SIF BAS (ME1) -IN
SIF BAS (ME2) -IN
SIF ENH (ME1) -IN
SIF ENH (ME2) -IN
BLOCK A X2
P0~P4
PTN ADD
ROM READ ADD
CK1
FUNCTION CTL
SEQUENCE CK
RAM R/W CTL
SERIAL CTL
CS
TIMING
CK2
TRANSFER DATA
MPX GAIN
MPX SAWTOOTH
OE CTL
MPX MOD DATA
REFER TO SCHEMATIC DIAGRAM (WKG-4 (3/5))
*IC201 TC74ACT574F
*IC202 TC74ACT574F
*IC203 CXD8059Q
*IC204 CXD8062Q
*IC205 TC74AC04F
*IC206 WS27C010L-12
*IC207 WS27C010L-12
*IC208 TC74ACT574F
*IC209 TC74ACT574F
*IC210 CXD8063Q
*IC211 TC74AC574F
*IC212 TC74AC574F
*IC213 CXD8062Q
*IC214 CXD8062Q
*IC215 WS57C45-35
*IC216 WS57C45-35
*IC217 CXD8062Q
*IC218 CXD8053Q
*IC220 TC74AC04F
*IC221 TC74AC02F
*CN201
*E201

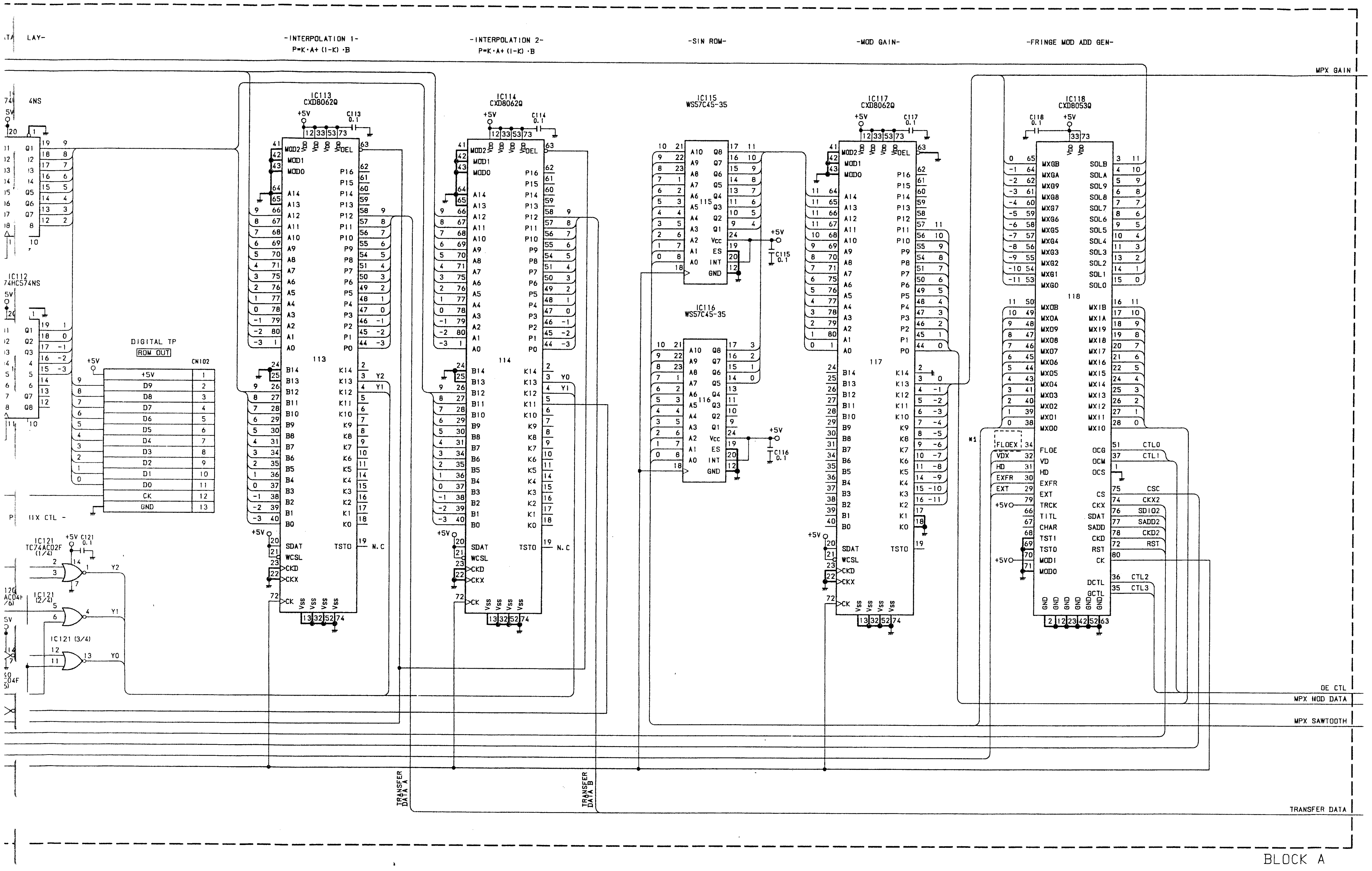
A
B
C
D
E
F
G
H


SQCK2X-OUT 1/5
RW CTL-OUT 1/5
BLOCK B X2
CS
MPX MOD DATA
MPX GAIN
MPX SAWTOOTH
OE CTL
TIMING
SERIAL CTL
FUNCTION CTL
CK3
CK4
R DATA
Q ADD
REFER TO SCHEMATIC DIAGRAM (WKG-4 (4/5))
BLOCK C X2
CS
R DATA
Q ADD
TIMING
SERIAL CTL
TRANSFER ADD
TRANSFER DATA
CK5
CK6
CK (27M)
RAM R/W CTL
FUNCTION CTL
LSLD
WSLD
REFER TO SCHEMATIC DIAGRAM (WKG-4 (5/5))
DA
GA
TOOTH
E CTL
DATA
GAIN
*C229 0.1
*C230 0.1
*C231 0.1
*C232 0.1
*C233 0.1
*C234 0.1
*C235 0.1
*C236 0.1
*C237 0.1
*C238 0.1
*C239 0.1
*C240 0.1
*C290 0.1
*C291 0.1
*CN230
*CN231
*E202
*IC229 CXD8053Q
*IC230 CXD8059Q
*IC231 CXD8190Q
*IC232 CXD8059Q
*IC233 CXD8063Q
*IC234 CXD8063Q
*IC235 CXD8190Q
*IC236 CXD8063Q
*IC237 CXD8063Q
*IC238 CXD8062Q
*IC239 CXD8060Q
*IC240 TC74AC04F
*C250 0.1
*C251 0.1
*C252 0.1
*C253 0.1
*C254 0.1
*C255 0.1
*C256 0.1
*C257 0.1
*C258 0.1
*C259 0.1
*C260 0.1
*C261 0.1
*C262 0.1
*C263 0.1
*C264 0.1
*C265 0.1
*C266 0.1
*C267 0.1
*C268 0.1
*C269 0.1
*C270 0.1
*C271 0.1
*C272 0.1
*C273 0.1
*C274 0.1
*CN232
*CN233
*CN234
*R230 100k
*R231 100k
*R232 100k
*R233 100k
*R234 100k
*R235 100k
*R240 22
*R241 22
*R242 22
*R243 22
*R244 22
*R245 22
*R246 22
*R247 22
*R248 22
*R249 22
*R250 22
*R251 22
*R252 22
*R253 22
*R254 22
*R255 22
*R256 22
*R257 22
*R258 22
*R259 22
*R260 22
*R261 22
*R262 22
*R263 22
*R264 22
*R265 22
*R266 22
*R267 22
*IC250 TC74AC574F
*IC251 TC74AC574F
*IC252 TC74ACT574F
*IC253 TC74ACT574F
*IC254 CXD8062Q
*IC255 CXD8062Q
*IC256 MB81C78A-35P
*IC257 MB81C78A-35P
*IC258 MB81C78A-35P
*IC259 MB81C78A-35P
*IC260 CXD8190Q
*IC261 TC74ACT574F
*IC262 TC74ACT574F
*IC263 CXD8062Q
*IC264 CXD8062Q
*IC265 WS57C49B-45
*IC266 WS57C49B-45
*IC267 CXD8061Q
*IC268 SN74HC574NS
*IC269 SN74HC574NS
*IC270 SN74HC564NS
*IC271 SN74HC564NS
*IC272 MC74HC589F
*IC273 MC74HC589F
*IC274 TC74AC02F
CNX1
LSLD1 13 D21
LSLD1 12 C21
LSLD1 11 B21
LSLD1 10 A21
LSLD1 9 D22
LSLD1 8 C22
LSLD1 7 B22
LSLD1 6 A22
LSLD1 5 D23
LSLD1 4 C23
LSLD1 3 B23
LSLD1 2 A23
LSLD1 1 D24
LSLD1 0 C24
CNY1
WSLD1 13 B8
WSLD1 12 A8
WSLD1 11 D9
WSLD1 10 C9
WSLD1 9 B9
WSLD1 8 A9
WSLD1 7 D10
WSLD1 6 C10
WSLD1 5 B10
WSLD1 4 A10
WSLD1 3 D11
WSLD1 2 C11
WSLD1 1 B11
WSLD1 0 A11
CNX1
LSLD2 13 B24
LSLD2 12 A24
LSLD2 11 D25
LSLD2 10 C25
LSLD2 9 B25
LSLD2 8 A25
LSLD2 7 D26
LSLD2 6 C26
LSLD2 5 B26
LSLD2 4 A26
LSLD2 3 D27
LSLD2 2 C27
LSLD2 1 B27
LSLD2 0 A27
CNY1
WSLD2 13 D12
WSLD2 12 C12
WSLD2 11 B12
WSLD2 10 A12
WSLD2 9 D13
WSLD2 8 C13
WSLD2 7 B13
WSLD2 6 A13
WSLD2 5 D14
WSLD2 4 C14
WSLD2 3 B14
WSLD2 2 A14
WSLD2 1 D15
WSLD2 0 C15
13
12
11
10
9
8
7
6
5
4
3
2
1
0

WKG-4 (2/5)
1-636-508-11, 12, 13
DVS-8000

WKG-4 (3/5) BASIC WIPE BOARD

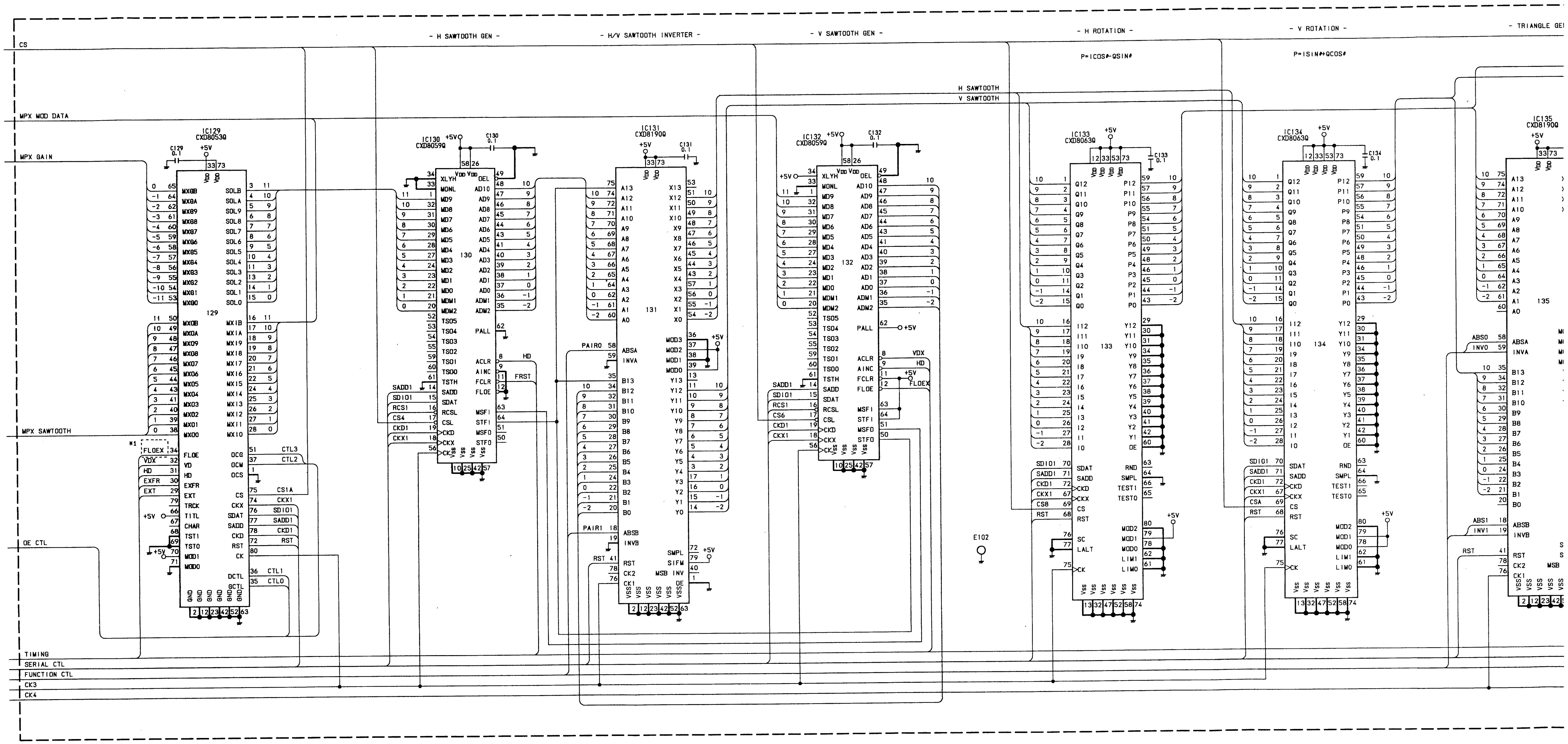

-ADD LATCH-
-POLYGON ADD GEN-
-ABSOLUTION-
-POLYGON ADD OFFSET ADDER-
P=|A|+G
-PATTERN ROM-
512K or 1M ROM AVAILABLE
-ROM DATA LATCH-
-FRINGE MOD ADD-
-SPRING WIPE GEN-
P=|+Q·G+Y
-DATA DELAY-
PTN ADD
ROM READ ADD
IC101 TC74ACT574F
IC102 TC74ACT574F
IC103 CXD8059Q
IC104 CXD8062Q
IC105 TC74AC04F (5/6)
IC106 WS27C010L-12 -PAT1
IC107 WS27C010L-12 -PAT2
IC108 TC74ACT574F
IC109 TC74ACT574F
IC110 CXD8063Q
IC120 TC74AC04F (2/6)
IC111 SN74HC574NS
IC112 SN74HC574NS
DIGITAL TP
T ADD
CN101
IC105 TC74AC04F (6/6)
IC105 TC74AC04F (1/6) (2/6)
IC105 TC74AC04F (3/6) (4/6)
E101
- PAT MIX CTL -
IC121 TC74AC02F (1/4)
IC120 TC74AC04F (1/6)
IC121 (2/4)
IC121 (3/4)
IC140 TC74AC04F (4/6)
SQCK2X
SQCK1X
WPAT
SQCK1X
SQCK3
SAMPLE
ROM READ ADDRESS
SEQUENCE CK
CK1
FUNCTION CTL
RAM R/W CTL
SERIAL CTL
CS
TIMING
CK2
DIGIT.
ROM


-INTERPOLATION 1-
P=K·A+(1-K)·B
-INTERPOLATION 2-
P=K·A+(1-K)·B
-SIN ROM-
-MOD GAIN-
-FRINGE MOD ADD GEN-
MPX GAIN
IC113
CXD8062Q
IC114
CXD8062Q
IC115
WS57C45-35
IC116
WS57C45-35
IC117
CXD8062Q
IC118
CXD8053Q
IC112
74HC574NS
DIGITAL TP
ROM OUT
CN102
IC121
TC74AC02F
OE CTL
MPX MOD DATA
MPX SAWTOOTH
TRANSFER DATA
TRANSFER DATA A
TRANSFER DATA B
BLOCK A

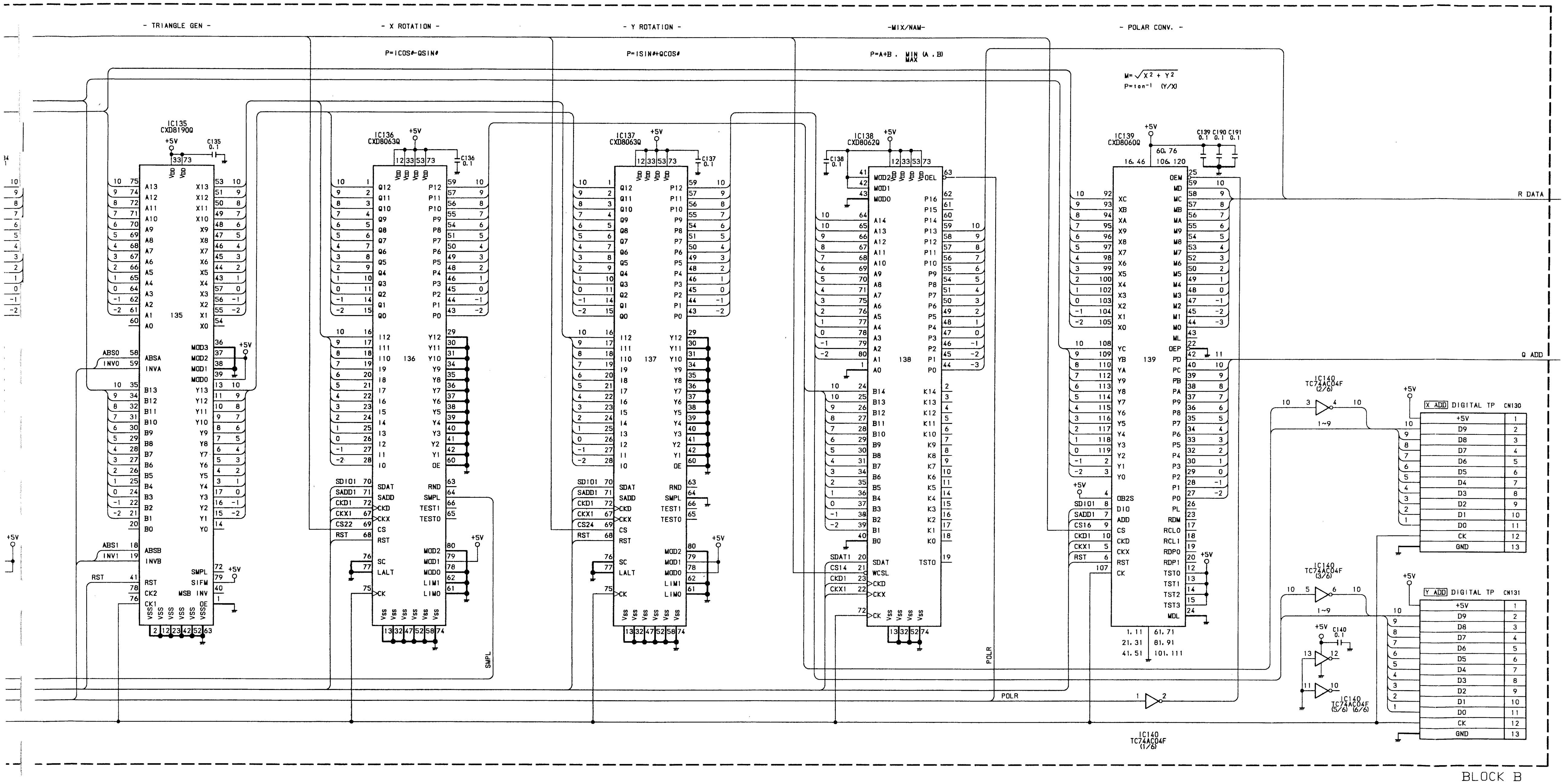
WKG-4 (3/5)
1-636-508-11, 12, 13
DVS-8000

Note: ✻1-----(-13) board is "FLOE2".

WKG-4 (4/5) BASIC WIPE BOARD


CS
MPX MOD DATA
MPX GAIN
MPX SAWTOOTH
OE CTL
TIMING
SERIAL CTL
FUNCTION CTL
CK3
CK4
- H SAWTOOTH GEN -
- H/V SAWTOOTH INVERTER -
- V SAWTOOTH GEN -
- H ROTATION -
P=ICOS#-QSIN#
- V ROTATION -
P=ISIN#+QCOS#
- TRIANGLE GE
H SAWTOOTH
V SAWTOOTH
IC129 CXD8053Q
IC130 CXD8059Q
IC131 CXD8190Q
IC132 CXD8059Q
IC133 CXD8063Q
IC134 CXD8063Q
IC135 CXD8190Q
C129 0.1
C130 0.1
C131 0.1
C132 0.1
C133 0.1
C134 0.1
+5V
E102
*1 FLOEX

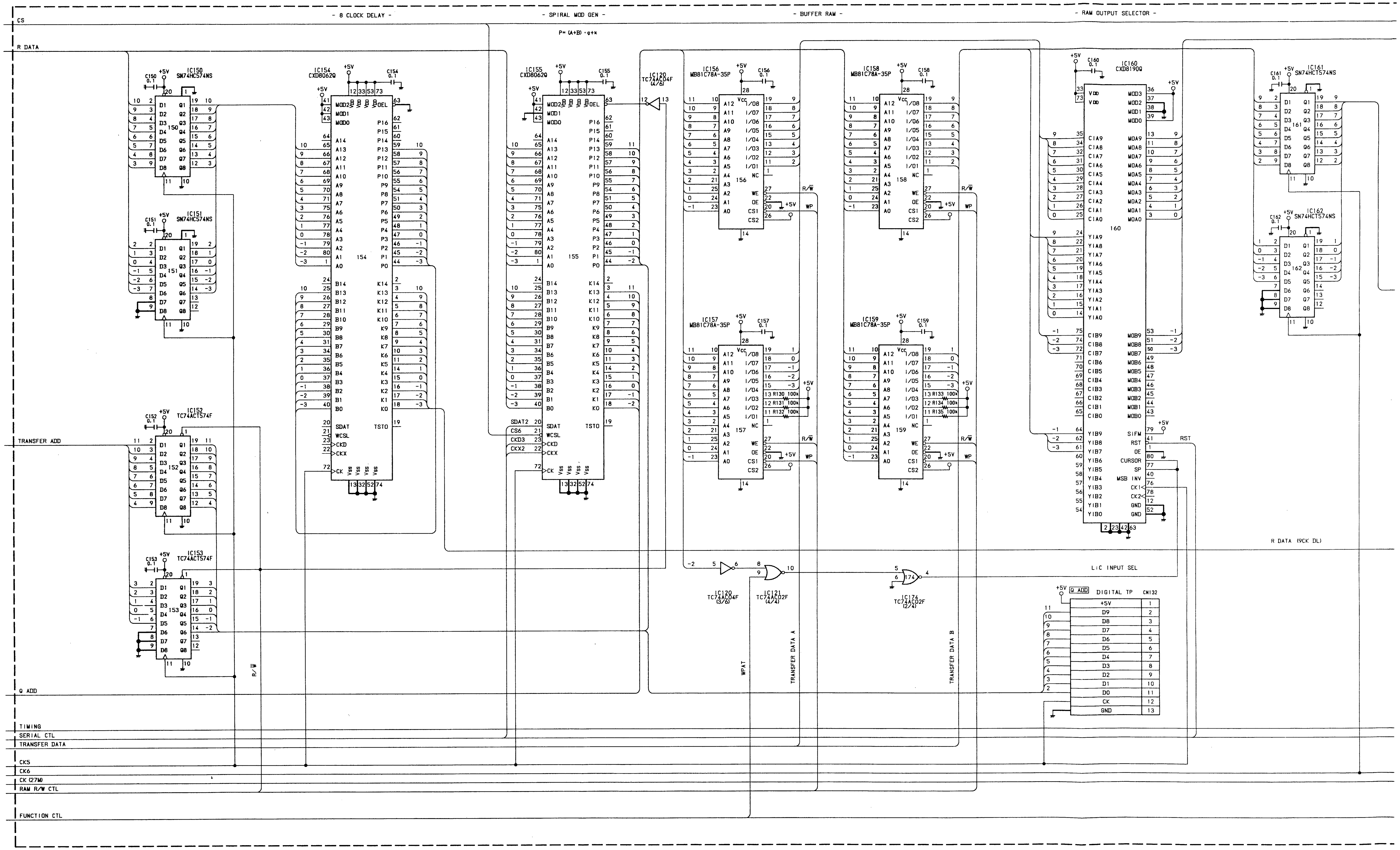
Note: *1-----(-13) board is "FLOE2".


- TRIANGLE GEN -
- X ROTATION -
P=ICOS#-QSIN#
- Y ROTATION -
P=ISIN#+QCOS#
-MIX/NAM-
P=A+B, MIN MAX (A, B)
- POLAR CONV. -
M=√X² + Y²
P=tan⁻¹ (Y/X)
IC135 CXD8190Q
IC136 CXD8063Q
IC137 CXD8063Q
IC138 CXD8062Q
IC139 CXD8060Q
IC140 TC74AC04F (1/6)
IC140 TC74AC04F (2/6)
IC140 TC74AC04F (3/6)
IC140 TC74AC04F (5/6) (6/6)
C135 0.1
C136 0.1
C137 0.1
C138 0.1
C139 C190 C191 0.1 0.1 0.1
C140 0.1
+5V
R DATA
Q ADD
X ADD DIGITAL TP CN130
Y ADD DIGITAL TP CN131
POLR
SMPL
RST
BLOCK B

WKG-4 (4/5)

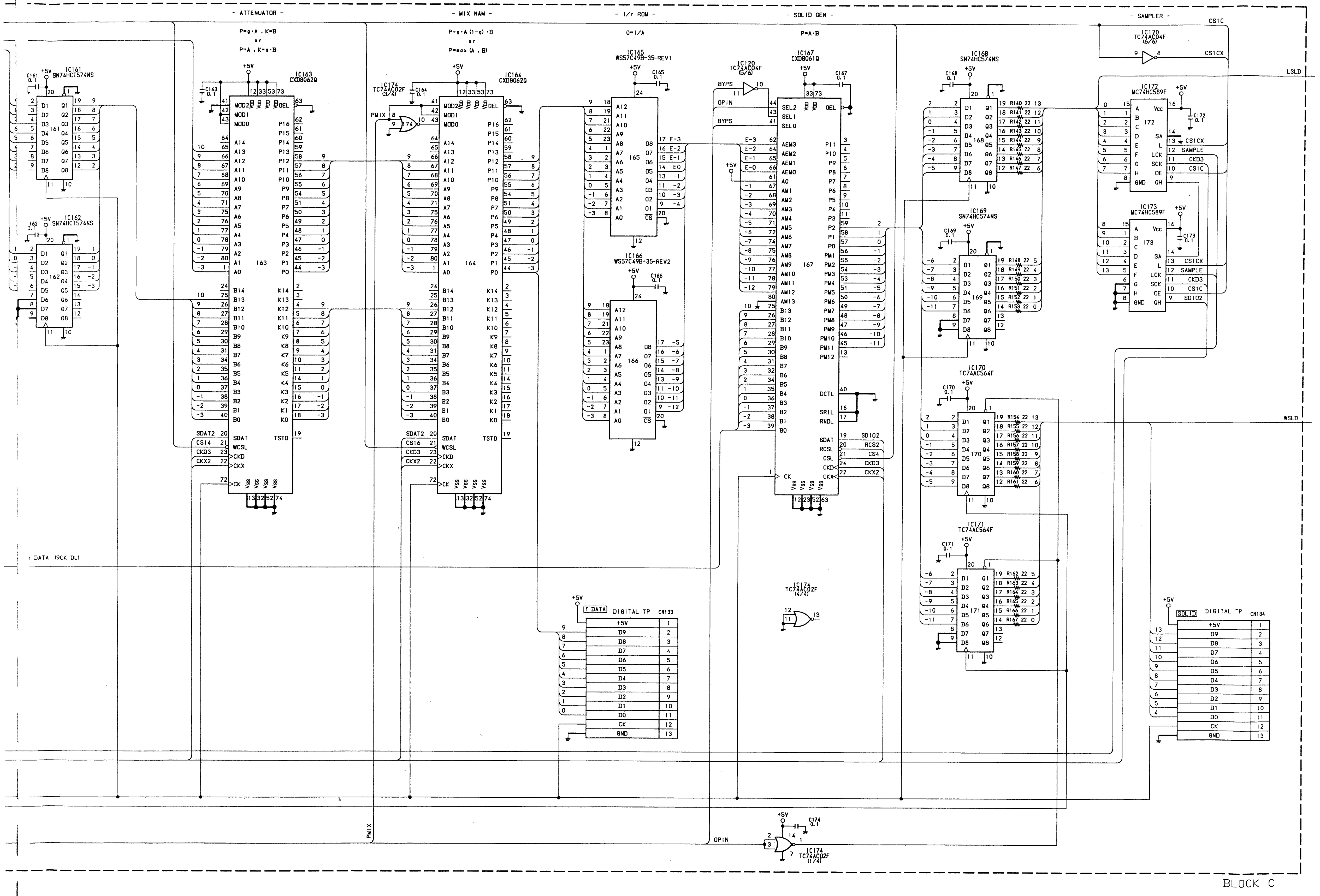
1-636-508-11, 12, 13
DVS-8000

WKG-4 (5/5) BASIC WIPE BOARD


- 8 CLOCK DELAY -
- SPIRAL MOD GEN -
P= (A+B) · g+k
- BUFFER RAM -
- RAM OUTPUT SELECTOR -
CS
R DATA
TRANSFER ADD
Q ADD
TIMING
SERIAL CTL
TRANSFER DATA
CK5
CK6
CK (27M)
RAM R/W CTL
FUNCTION CTL
IC150 SN74HC574NS
IC151 SN74HC574NS
IC152 TC74ACT574F
IC153 TC74ACT574F
IC154 CXD8062Q
IC155 CXD8062Q
IC120 TC74AC04F (4/6)
IC156 MB81C78A-35P
IC157 MB81C78A-35P
IC158 MB81C78A-35P
IC159 MB81C78A-35P
IC160 CXD8190Q
IC161 SN74HCT574NS
IC162 SN74HCT574NS
IC120 TC74AC04F (3/6)
IC121 TC74AC02F (4/4)
IC174 TC74AC02F (2/4)
R/W
WP
WPAT
TRANSFER DATA A
TRANSFER DATA B
R130 100k
R131 100k
R132 100k
R133 100k
R134 100k
R135 100k
RST
R DATA (9CK DL)
L:C INPUT SEL
Q ADD DIGITAL TP CN132
+5V
D9
D8
D7
D6
D5
D4
D3
D2
D1
D0
CK
GND
SDAT
WCSL
CKD
CKX
TSTO
SDAT2
CS6
CKD3
CKX2
VDD
SIFM
CURSOR
SP
MSB INV
CK1
CK2

1
2
3
4
5

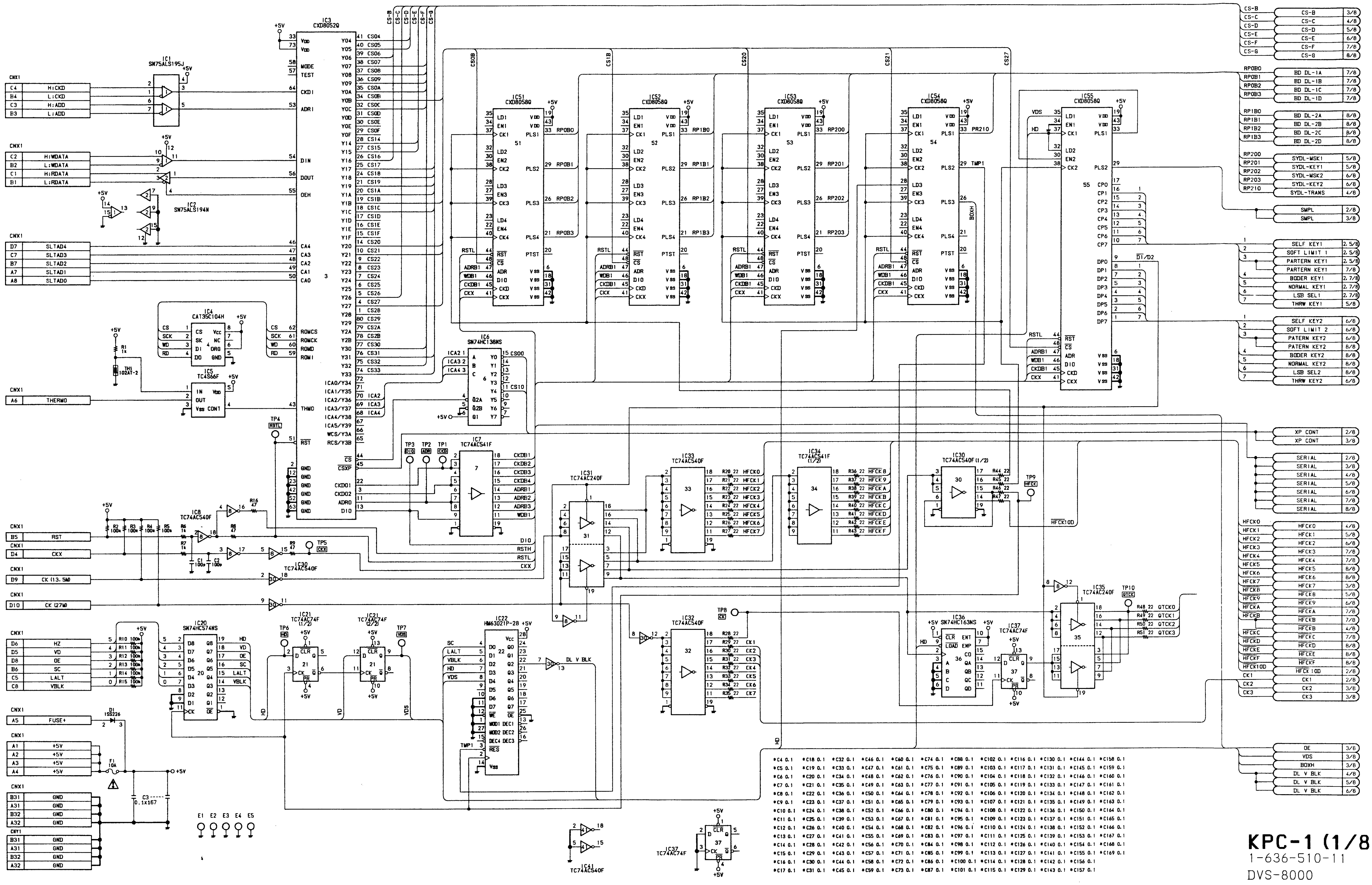
A B C D E F G H


- ATTENUATOR -
P=α·A . K=B
or
P=A . K=α·B
- MIX NAM -
P=α·A (1-α)·B
or
P=max (A . B)
- I/r ROM -
O=1/A
- SOLID GEN -
P=A·B
- SAMPLER -
IC161 SN74HCT574NS
IC162 SN74HCT574NS
IC163 CXD8062Q
IC164 CXD8062Q
IC174 TC74AC02F (3/4)
IC165 WS57C49B-35-REV1
IC166 WS57C49B-35-REV2
IC120 TC74AC04F (5/6)
IC167 CXD8061Q
IC168 SN74HC574NS
IC169 SN74HC574NS
IC170 TC74AC564F
IC171 TC74AC564F
IC120 TC74AC04F (6/6)
IC172 MC74HC589F
IC173 MC74HC589F
IC174 TC74AC02F (4/4)
IC174 TC74AC02F (1/4)
PMIX
BYPS
OPIN
CS1C
CS1CX
LSLD
WSLD
SAMPLE
CKD3
SD102
SDAT2
CS14
CS16
CKD3
CKX2
RCS2
CS4
I DATA (9CK DL)
I DATA DIGITAL TP CN133
SOLID DIGITAL TP CN134
+5V
D9
D8
D7
D6
D5
D4
D3
D2
D1
D0
CK
GND
BLOCK C

WKG-4 (5/5)
1-636-508-11, 12, 13
DVS-8000

KPC-1 (1/8) KEY PROCESSOR BOARD

S/N: 10001 through 10030


1
2
3
4
5
IC1 SN75ALS195J
IC2 SN75ALS194N
IC3 CXD8052Q
IC4 CAT35C104H
IC5 TC4S66F
IC6 SN74HC138NS
IC7 TC74AC541F
IC8 TC74AC540F
IC20 SN74HC574NS
IC21 TC74AC74F
IC22 HM63021P-28
IC30 TC74AC540F
IC31 TC74AC240F
IC32 TC74AC540F
IC33 TC74AC540F
IC34 TC74AC541F
IC35 TC74AC240F
IC36 SN74HC163NS
IC37 TC74AC74F
IC41 TC74AC540F
IC51 CXD8058Q
IC52 CXD8058Q
IC53 CXD8058Q
IC54 CXD8058Q
IC55 CXD8058Q
CNX1
THERMO
FUSE*
RST
CKX
CK(13.5M)
CK(27M)
HZ
VD
OE
SC
LALT
VBLK
DL V BLK
BD DL-1A
BD DL-1B
BD DL-1C
BD DL-1D
BD DL-2A
BD DL-2B
BD DL-2C
BD DL-2D
SYDL-MSK1
SYDL-KEY1
SYDL-MSK2
SYDL-KEY2
SYDL-TRANS
SMPL
SELF KEY1
SOFT LIMIT 1
PATERN KEY1
BODER KEY1
NORMAL KEY1
LSB SEL1
THRW KEY1
SELF KEY2
SOFT LIMIT 2
PATERN KEY2
BODER KEY2
NORMAL KEY2
LSB SEL2
THRW KEY2
XP CONT
SERIAL
HFCK0
HFCK10D
CK1
CK2
CK3
VDS
BOXH
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
E1 E2 E3 E4 E5

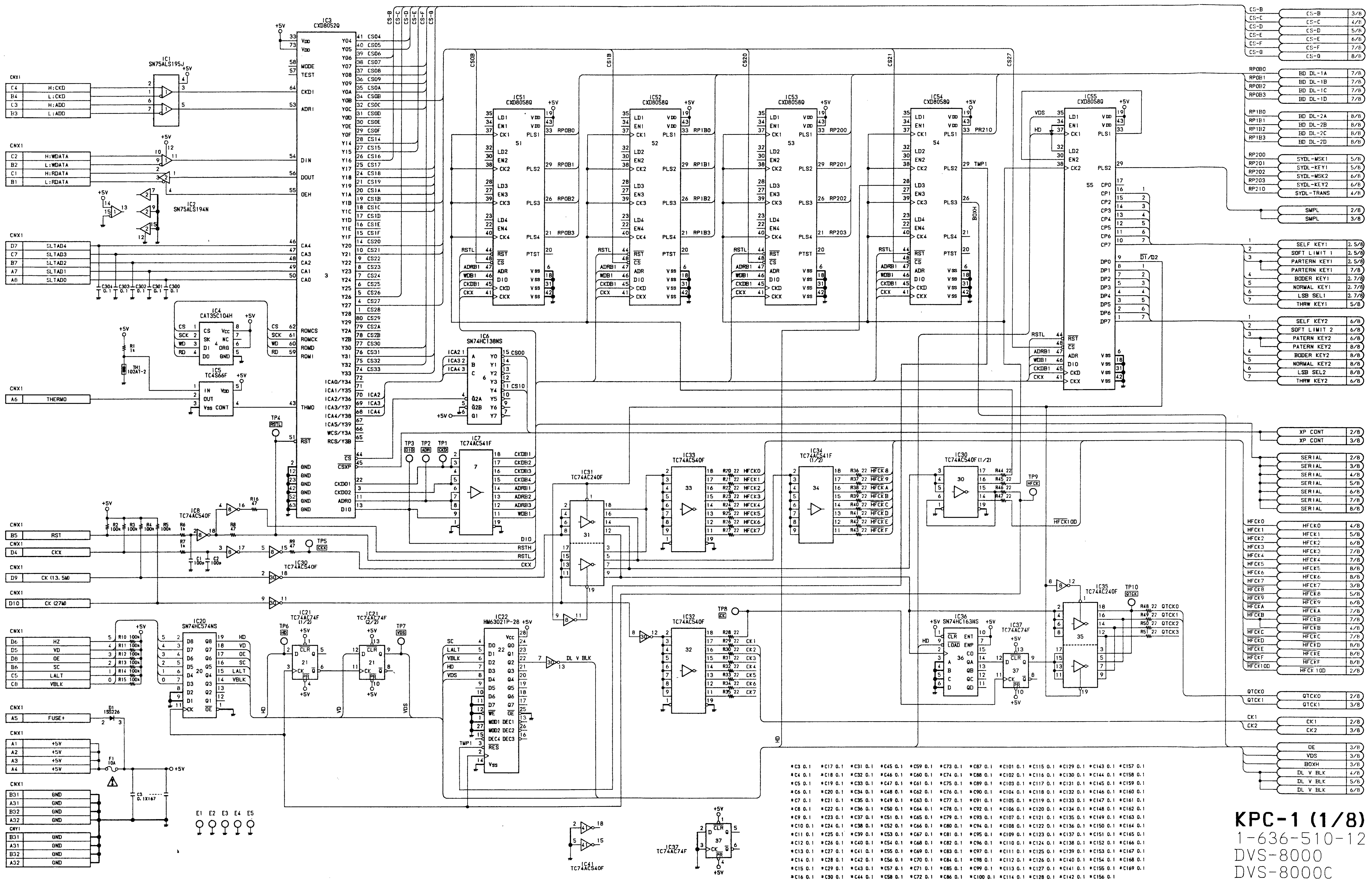
KPC-1 (1/8)
1-636-510-11
DVS-8000

B-SYX121-KPC1#1

A B C D E F G H

KPC-1 KEY PROCESSOR BOARD

S/N; 10031 and higher


IC3 CXD8052Q
IC1 SN75ALS195J
IC2 SN75ALS194N
IC4 CAT35C104H
IC5 TC4S66F
IC6 SN74HC138NS
IC7 TC74AC541F
IC51 CXD8058Q
IC52 CXD8058Q
IC53 CXD8058Q
IC54 CXD8058Q
IC55 CXD8058Q
IC8 TC74AC540F
IC20 SN74HC574NS
IC21 TC74AC74F
IC22 HM6302IP-28
IC30 TC74AC540F
IC31 TC74AC240F
IC32 TC74AC540F
IC33 TC74AC540F
IC34 TC74AC541F
IC35 TC74AC240F
IC36 SN74HC163NS
IC37 TC74AC74F
IC41 TC74AC540F
CNX1
THERMO
RST
CKX
CK (13.5M)
CK (27M)
HD
VD
OE
SC
LALT
VBLK
FUSE+
+5V
GND
CS-B
CS-C
CS-D
CS-E
CS-F
CS-G
BD DL-1A
BD DL-1B
BD DL-1C
BD DL-1D
BD DL-2A
BD DL-2B
BD DL-2C
BD DL-2D
SYDL-MSK1
SYDL-KEY1
SYDL-MSK2
SYDL-KEY2
SYDL-TRANS
SMPL
SELF KEY1
SOFT LIMIT 1
PATERN KEY1
BODER KEY1
NORMAL KEY1
LSB SEL1
THRW KEY1
SELF KEY2
SOFT LIMIT 2
PATERN KEY2
BODER KEY2
NORMAL KEY2
LSB SEL2
THRW KEY2
XP CONT
SERIAL
HFCK0
HFCK10D
QTCK0
QTCK1
CK1
CK2
VDS
BOXH
DL V BLK
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
E1 E2 E3 E4 E5

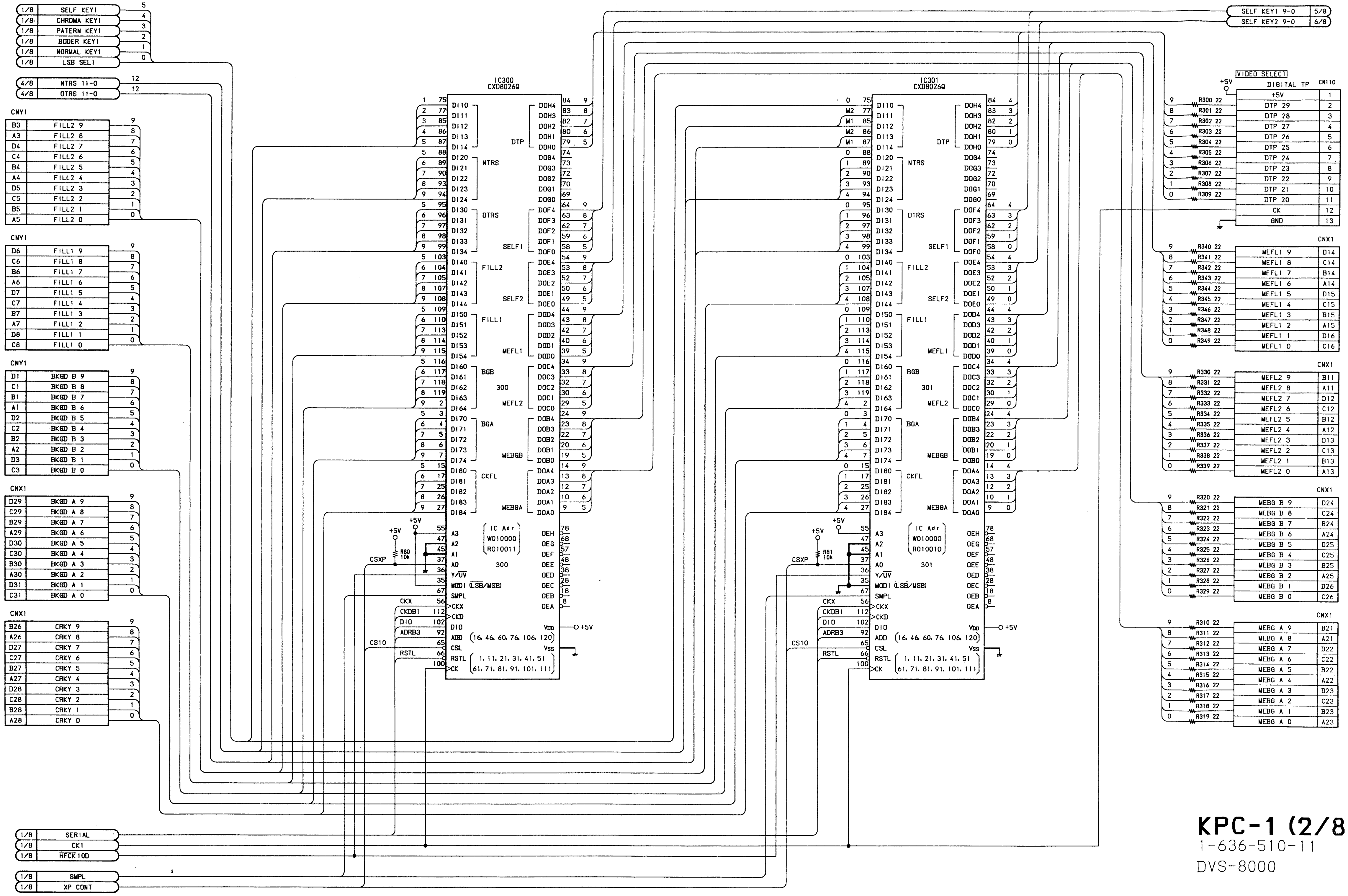
KPC-1 (1/8)
1-636-510-12
DVS-8000
DVS-8000C

1 2 3 4 5

A | B | C | D | E | F | G | H

KPC-1 (2/8) KEY PROCESSOR BOARD

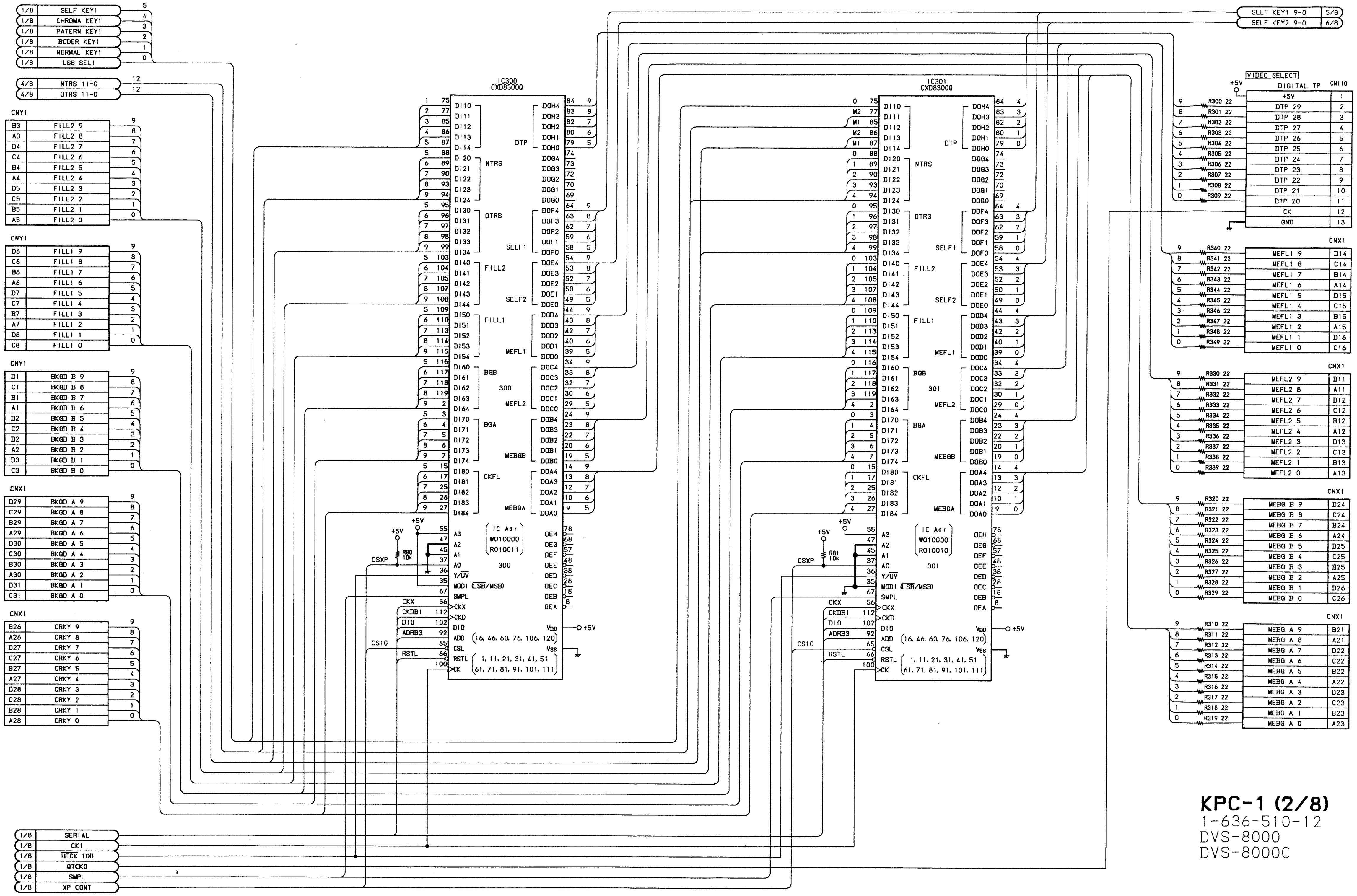
S/N; 10001 through 10030


1/8 SELF KEY1
1/8 CHROMA KEY1
1/8 PATERN KEY1
1/8 BODER KEY1
1/8 NORMAL KEY1
1/8 LSB SEL1
4/8 NTRS 11-0
4/8 OTRS 11-0
CNY1
FILL2 9
FILL2 0
FILL1 9
FILL1 0
BKGD B 9
BKGD B 0
CNX1
BKGD A 9
BKGD A 0
CRKY 9
CRKY 0
IC300
CXD8026Q
IC301
CXD8026Q
DTP
NTRS
OTRS
SELF1
FILL2
SELF2
FILL1
MEFL1
BGB
MEFL2
BGA
MEBGB
CKFL
MEBGA
IC Adr
W010000
R010011
W010000
R010010
300
301
A3
A2
A1
A0
Y/UV
MOD1 (LSB/MSB)
SMPL
CKX
CKD
DIO
ADD
CSL
RSTL
CK
CKDB1
ADRB3
CSXP
CS10
R80 10k
R81 10k
+5V
VDD
VSS
(16, 46, 60, 76, 106, 120)
1, 11, 21, 31, 41, 51
61, 71, 81, 91, 101, 111
SELF KEY1 9-0 5/8
SELF KEY2 9-0 6/8
VIDEO SELECT
DIGITAL TP
CN110
DTP 29
DTP 20
CK
GND
MEFL1 9
MEFL1 0
MEFL2 9
MEFL2 0
MEBG B 9
MEBG B 0
MEBG A 9
MEBG A 0
1/8 SERIAL
1/8 CK1
1/8 HFCK10D
1/8 SMPL
1/8 XP CONT

KPC-1 (2/8)
1-636-510-11
DVS-8000

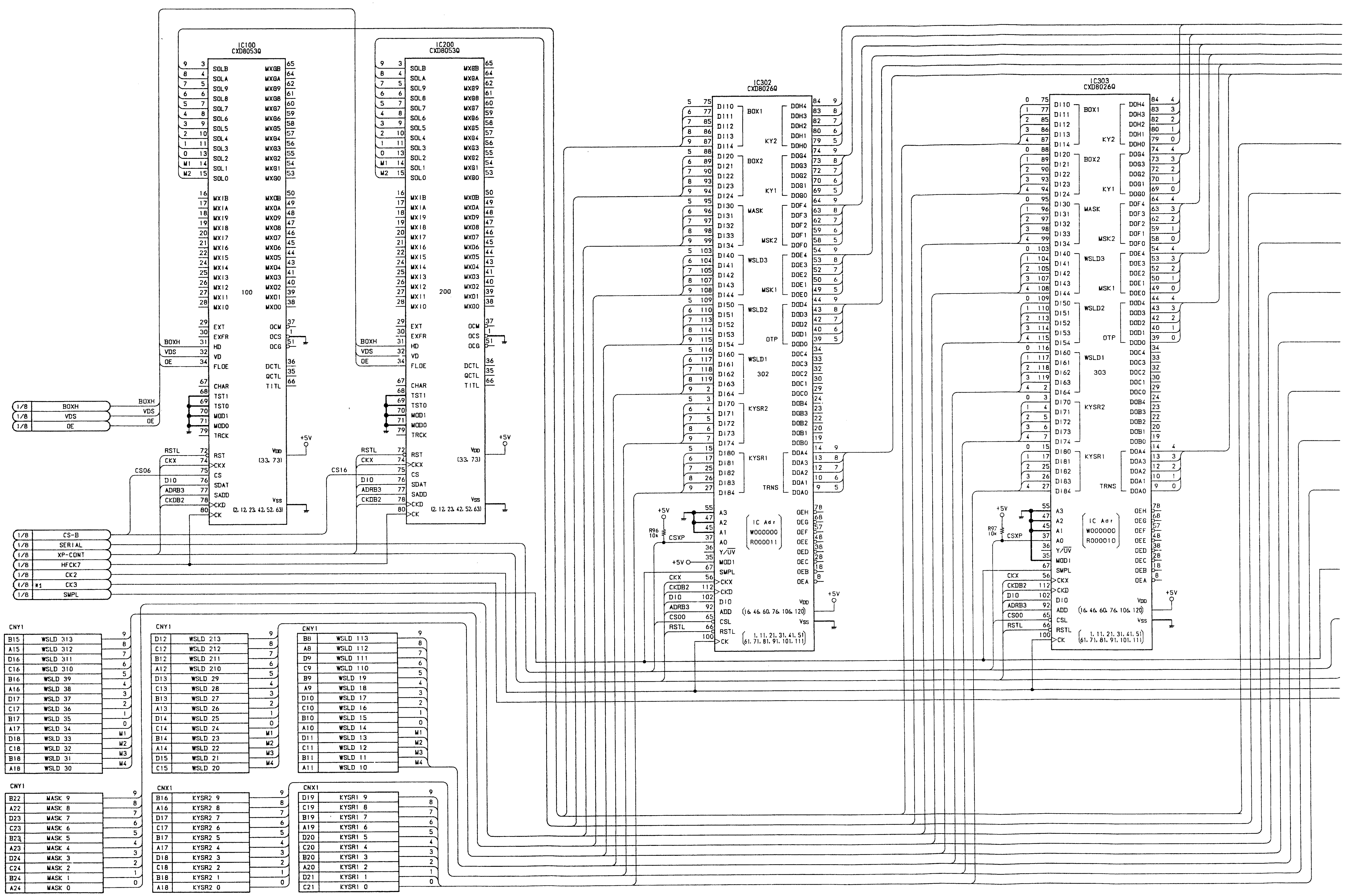
KPC-1 KEY PROCESSOR BOARD

S/N; 10031 and higher

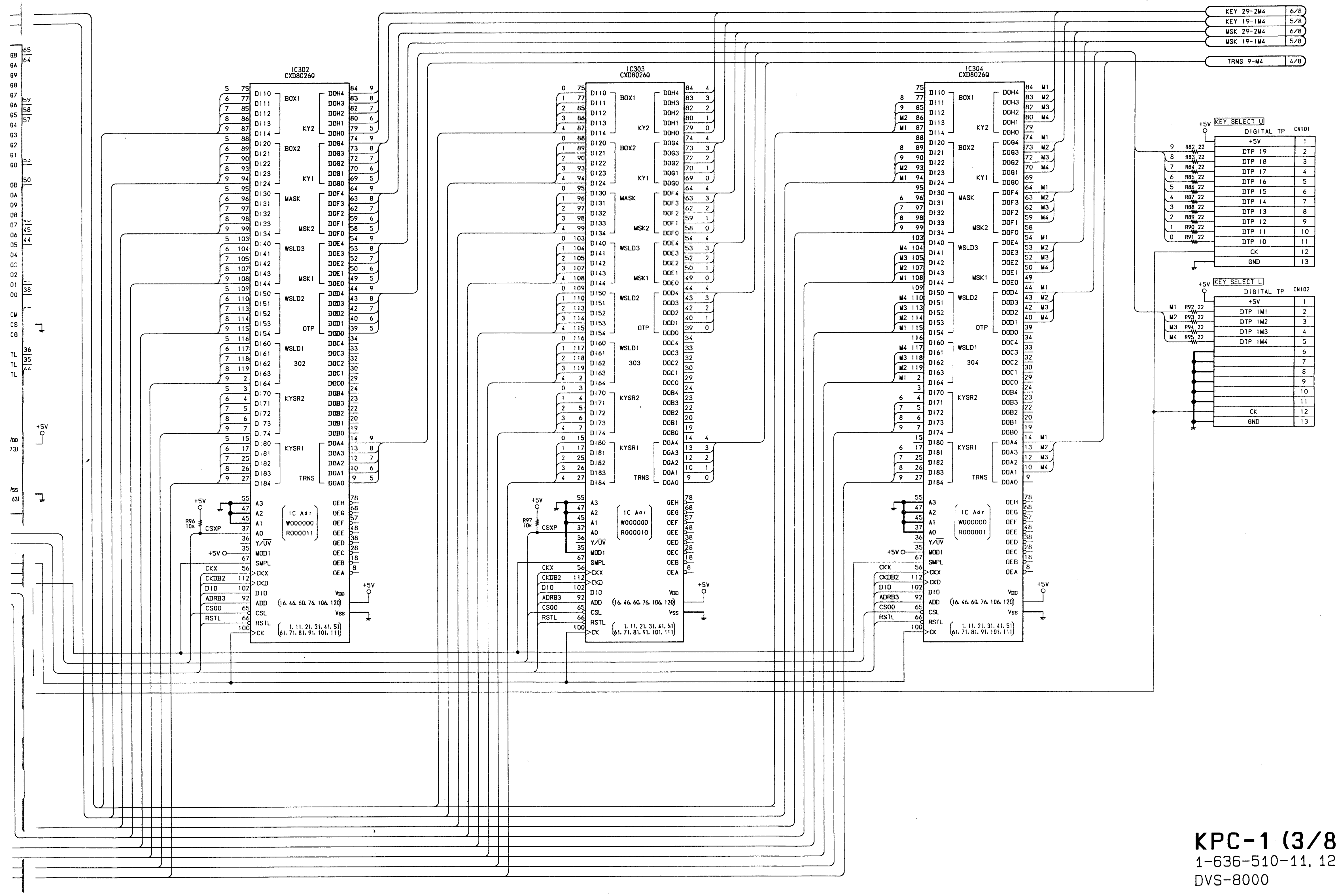

1/8 SELF KEY1
1/8 CHROMA KEY1
1/8 PATERN KEY1
1/8 BODER KEY1
1/8 NORMAL KEY1
1/8 LSB SEL1
4/8 NTRS 11-0
4/8 OTRS 11-0
CNY1
FILL2 9 … FILL2 0
FILL1 9 … FILL1 0
BKGD B 9 … BKGD B 0
CNX1
BKGD A 9 … BKGD A 0
CRKY 9 … CRKY 0
IC300
CXD8300Q
IC301
CXD8300Q
NTRS
OTRS
FILL2
FILL1
BGB
BGA
CKFL
DTP
SELF1
SELF2
MEFL1
MEFL2
MEBGB
MEBGA
IC Adr
W010000
R010011
R010010
300
301
A3 A2 A1 A0
Y/UV
MOD1 (LSB/MSB)
SMPL
CKX
CKDB1
DI0
ADRB3
CSXP
CS10
RSTL
CSL
ADD
CK
VDD
VSS
+5V
R80 10k
R81 10k
(16, 46, 60, 76, 106, 120)
(1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111)
SELF KEY1 9-0 5/8
SELF KEY2 9-0 6/8
VIDEO SELECT
DIGITAL TP
CN110
DTP 29 … DTP 20
CK
GND
R300 22 … R309 22
CNX1
MEFL1 9 … MEFL1 0
R340 22 … R349 22
MEFL2 9 … MEFL2 0
R330 22 … R339 22
MEBG B 9 … MEBG B 0
R320 22 … R329 22
MEBG A 9 … MEBG A 0
R310 22 … R319 22
1/8 SERIAL
1/8 CK1
1/8 HFCK 10D
1/8 OTCK0
1/8 SMPL
1/8 XP CONT

KPC-1 (2/8)
1-636-510-12
DVS-8000
DVS-8000C

KPC-1 (3/8) KEY PROCESSOR BOARD


1
2
3
4
5
IC100
CXD8053Q
IC200
CXD8053Q
IC302
CXD8026Q
IC303
CXD8026Q
SOLB
SOLA
SOL9
SOL8
SOL7
SOL6
SOL5
SOL4
SOL3
SOL2
SOL1
SOL0
MX0B
MX0A
MX09
MX08
MX07
MX06
MX05
MX04
MX03
MX02
MX01
MX00
MX1B
MX1A
MX19
MX18
MX17
MX16
MX15
MX14
MX13
MX12
MX11
MX10
EXT
EXFR
HD
VD
FLOE
OCM
OCS
OCG
DCTL
QCTL
TITL
CHAR
TST1
TST0
MOD1
MOD0
TRCK
RST
CKX
CS
SDAT
SADD
CKD
CK
VDD
(33, 73)
VSS
(2, 12, 23, 42, 52, 63)
100
200
BOXH
VDS
OE
RSTL
CKX
CS06
CS16
DI0
ADRB3
CKDB2
+5V
1/8
BOXH
VDS
OE
CS-B
SERIAL
XP-CONT
HFCK7
CK2
*1
CK3
SMPL
BOX1
BOX2
KY2
KY1
MASK
MSK2
MSK1
WSLD3
WSLD2
WSLD1
OTP
KYSR2
KYSR1
TRNS
302
303
A3
A2
A1
A0
Y/UV
MOD1
SMPL
CKX
CKD
DIO
ADD
CSL
RSTL
CK
OEH
OEG
OEF
OEE
OED
OEC
OEB
OEA
IC Adr
W000000
R000011
R000010
R96
10k
R97
10k
CSXP
CS00
(16, 46, 60, 76, 106, 120)
(1, 11, 21, 31, 41, 51)
(61, 71, 81, 91, 101, 111)
CNY1
CNX1
WSLD 313
WSLD 312
WSLD 311
WSLD 310
WSLD 39
WSLD 38
WSLD 37
WSLD 36
WSLD 35
WSLD 34
WSLD 33
WSLD 32
WSLD 31
WSLD 30
WSLD 213
WSLD 212
WSLD 211
WSLD 210
WSLD 29
WSLD 28
WSLD 27
WSLD 26
WSLD 25
WSLD 24
WSLD 23
WSLD 22
WSLD 21
WSLD 20
WSLD 113
WSLD 112
WSLD 111
WSLD 110
WSLD 19
WSLD 18
WSLD 17
WSLD 16
WSLD 15
WSLD 14
WSLD 13
WSLD 12
WSLD 11
WSLD 10
MASK 9
MASK 8
MASK 7
MASK 6
MASK 5
MASK 4
MASK 3
MASK 2
MASK 1
MASK 0
KYSR2 9
KYSR2 8
KYSR2 7
KYSR2 6
KYSR2 5
KYSR2 4
KYSR2 3
KYSR2 2
KYSR2 1
KYSR2 0
KYSR1 9
KYSR1 8
KYSR1 7
KYSR1 6
KYSR1 5
KYSR1 4
KYSR1 3
KYSR1 2
KYSR1 1
KYSR1 0
M1
M2
M3
M4

Note: *1-----(-12) board is "GTCK1".


IC302
CXD8026Q
IC303
CXD8026Q
IC304
CXD8026Q
BOX1
KY2
BOX2
KY1
MASK
MSK2
WSLD3
MSK1
WSLD2
OTP
WSLD1
302
303
304
KYSR2
KYSR1
TRNS
IC Adr
W000000
R000011
R000010
R000001
+5V
R96 10k
R97 10k
CSXP
CKX
CKDB2
DIO
ADRB3
CS00
RSTL
Y/UV
MOD1
SMPL
CKD
ADD
CSL
VDD
VSS
(16, 46, 60, 76, 106, 120)
(1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111)
KEY 29-2M4 6/8
KEY 19-1M4 5/8
MSK 29-2M4 6/8
MSK 19-1M4 5/8
TRNS 9-M4 4/8
KEY SELECT U
DIGITAL TP
CN101
DTP 19
DTP 18
DTP 17
DTP 16
DTP 15
DTP 14
DTP 13
DTP 12
DTP 11
DTP 10
CK
GND
R82 22
R83 22
R84 22
R85 22
R86 22
R87 22
R88 22
R89 22
R90 22
R91 22
KEY SELECT L
CN102
DTP 1M1
DTP 1M2
DTP 1M3
DTP 1M4
R92 22
R93 22
R94 22
R95 22

KPC-1 (3/8)

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KPC-1 (4/8) KEY PROCESSOR BOARD

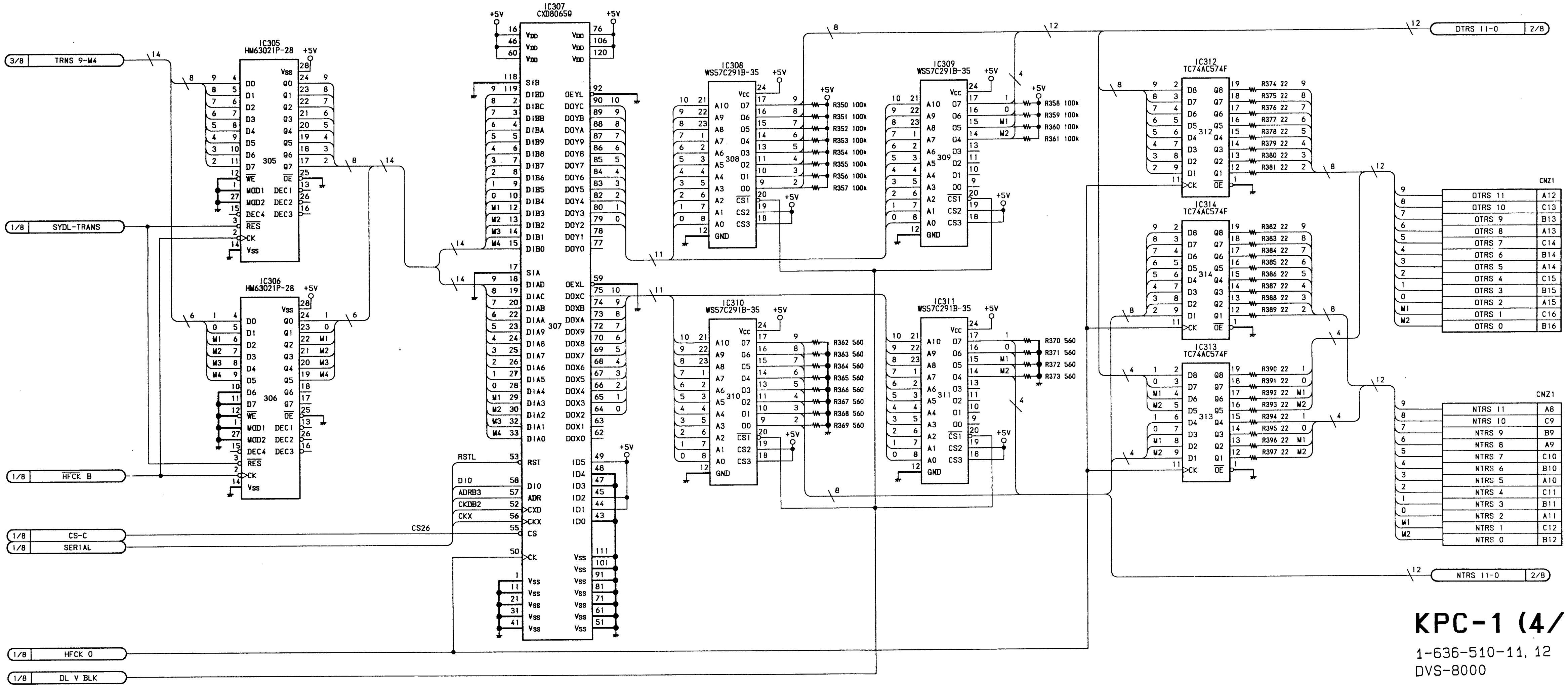
1

2

3

4

5


IC305
HM63021P-28
IC306
HM63021P-28
IC307
CXD8065Q
IC308
WS57C291B-35
IC309
WS57C291B-35
IC310
WS57C291B-35
IC311
WS57C291B-35
IC312
TC74AC574F
IC313
TC74AC574F
IC314
TC74AC574F
+5V
3/8 TRNS 9-M4
1/8 SYDL-TRANS
1/8 HFCK B
1/8 CS-C
1/8 SERIAL
1/8 HFCK 0
1/8 DL V BLK
DTRS 11-0 2/8
NTRS 11-0 2/8
CNZ1
DTRS 11
DTRS 10
DTRS 9
DTRS 8
DTRS 7
DTRS 6
DTRS 5
DTRS 4
DTRS 3
DTRS 2
DTRS 1
DTRS 0
NTRS 11
NTRS 10
NTRS 9
NTRS 8
NTRS 7
NTRS 6
NTRS 5
NTRS 4
NTRS 3
NTRS 2
NTRS 1
NTRS 0
RSTL
DIO
ADRB3
CKDB2
CKX
CS26
R350 100k
R351 100k
R352 100k
R353 100k
R354 100k
R355 100k
R356 100k
R357 100k
R358 100k
R359 100k
R360 100k
R361 100k
R362 560
R363 560
R364 560
R365 560
R366 560
R367 560
R368 560
R369 560
R370 560
R371 560
R372 560
R373 560

KPC-1 (4/8)

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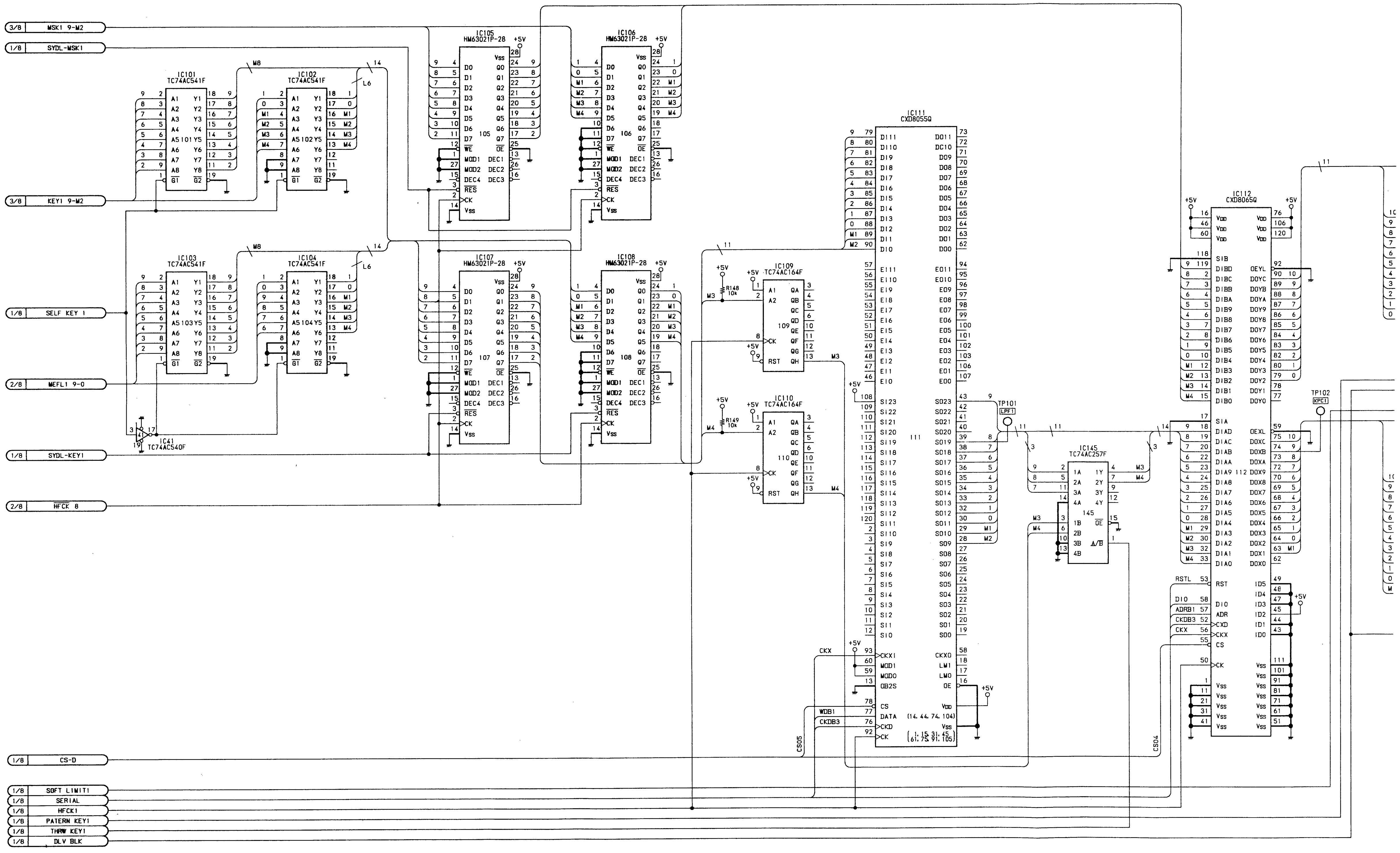
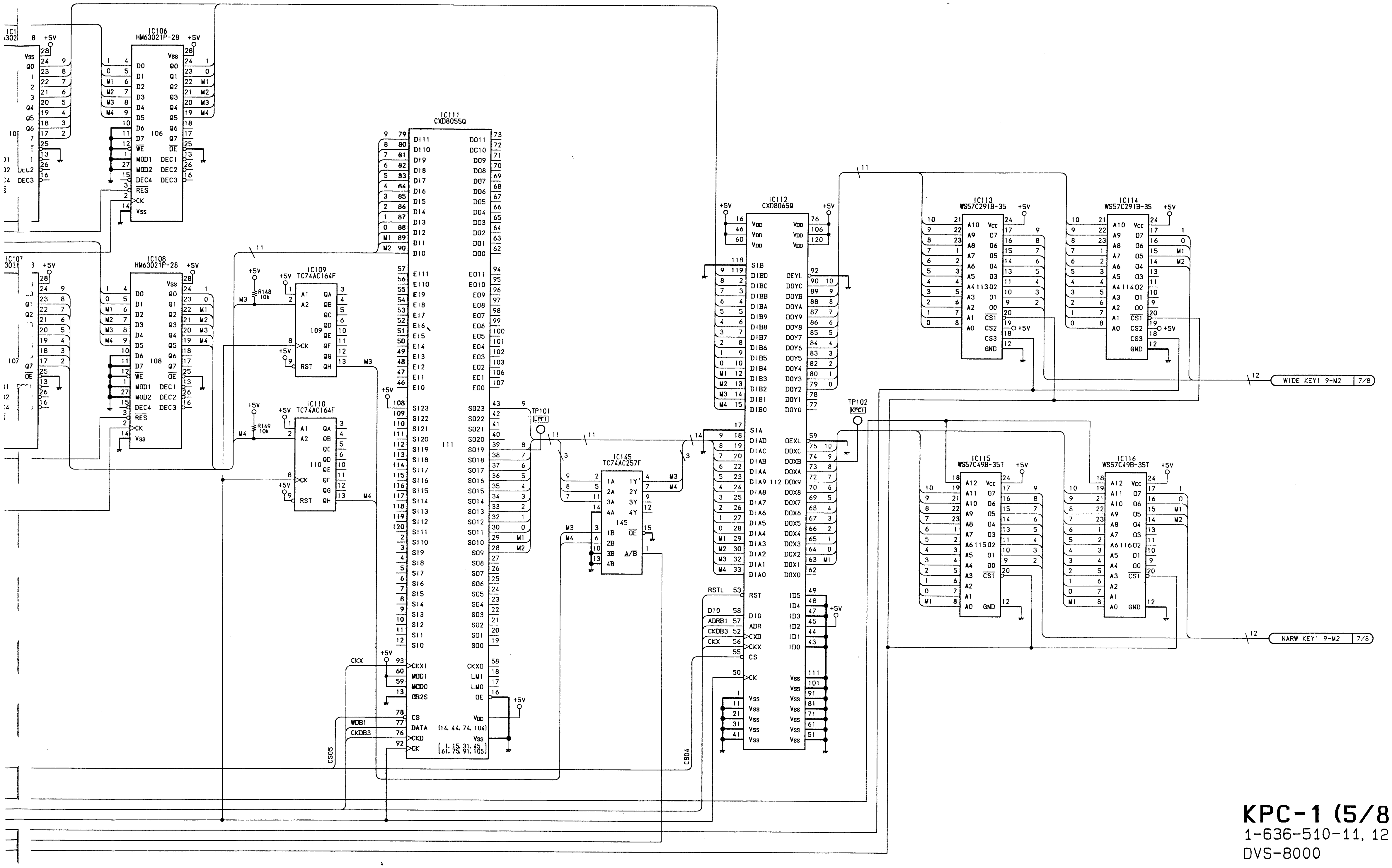
B-SYX121-KPC1#4

A | B | C | D | E | F | G | H

KPC-1 (5/8) KEY PROCESSOR BOARD


1
2
3
4
5
3/8 MSK1 9-M2
1/8 SYDL-MSK1
3/8 KEY1 9-M2
1/8 SELF KEY 1
2/8 MEFL1 9-0
1/8 SYDL-KEY1
2/8 HFCK 8
1/8 CS-D
1/8 SOFT LIMIT1
1/8 SERIAL
1/8 HFCK1
1/8 PATERN KEY1
1/8 THRW KEY1
1/8 DLV BLK
IC101 TC74AC541F
IC102 TC74AC541F
IC103 TC74AC541F
IC104 TC74AC541F
IC41 TC74AC540F
IC105 HM63021P-28
IC106 HM63021P-28
IC107 HM63021P-28
IC108 HM63021P-28
IC109 TC74AC164F
IC110 TC74AC164F
R148 10k
R149 10k
IC111 CXD8055Q
IC145 TC74AC257F
IC112 CXD8065Q
TP101
TP102 KPC1
+5V
CKX
WDB1
CKDB3
CS05
CS04
RSTL
DI0
ADRB1
(14, 44, 74, 104)
(1, 15, 31, 45, 61, 75, 91, 105)

A B C D E F G H


IC106
HM63021P-28
IC108
HM63021P-28
IC109
TC74AC164F
IC110
TC74AC164F
R148 10k
R149 10k
IC111
CXD8055Q
TP101
LPF1
IC145
TC74AC257F
IC112
CXD8065Q
TP102
KPC1
IC113
WS57C291B-35
IC114
WS57C291B-35
IC115
WS57C49B-35T
IC116
WS57C49B-35T
+5V
CKX
WDB1
CKDB3
CS05
CS04
RSTL
D10
ADRB1
CKDB3
CKX
M1
M2
M3
M4
WIDE KEY1 9-M2 7/8
NARW KEY1 9-M2 7/8

KPC-1 (5/8)

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E F G H I J K L

KPC-1 (6/8) KEY PROCESSOR BOARD

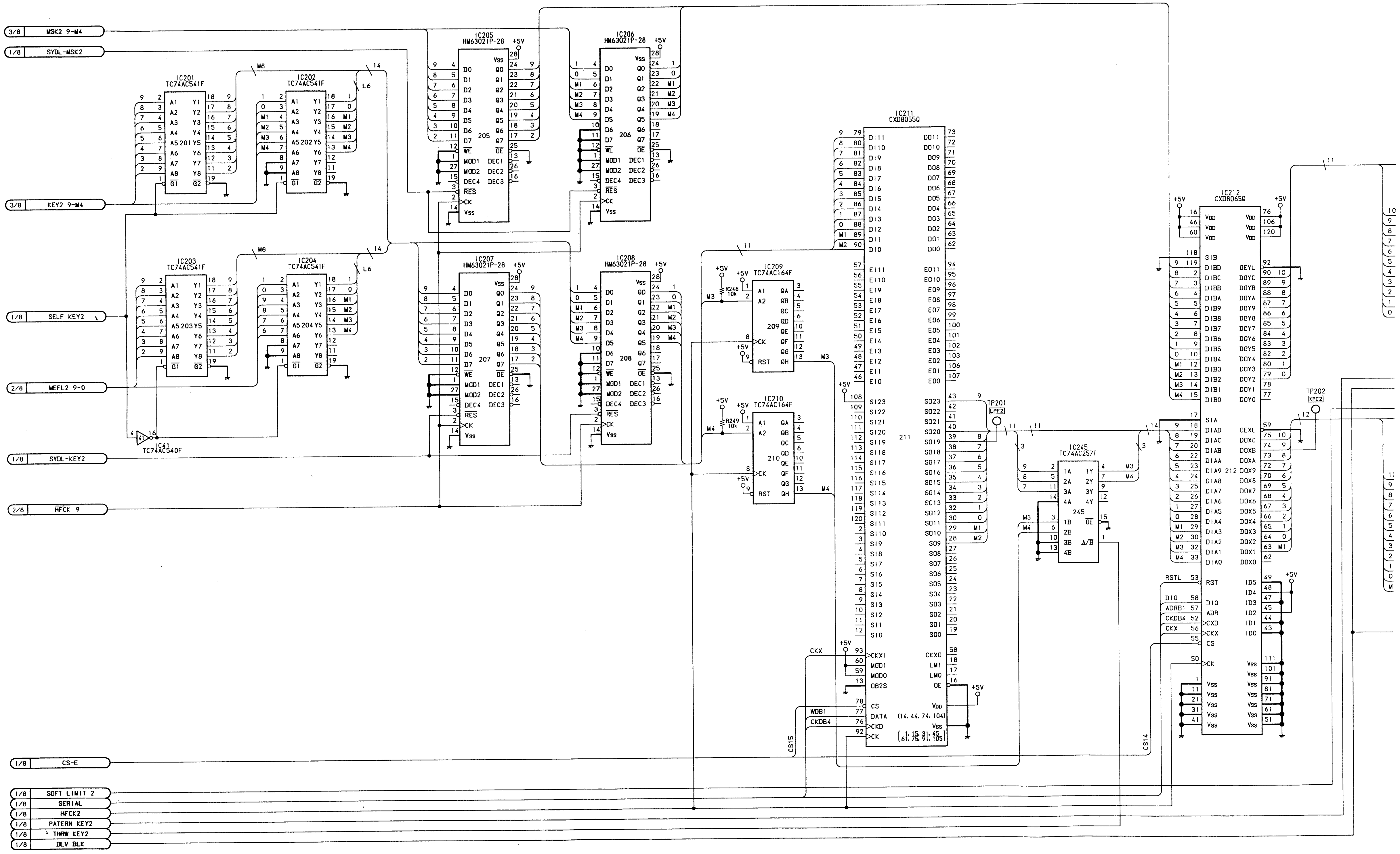
1

2

3

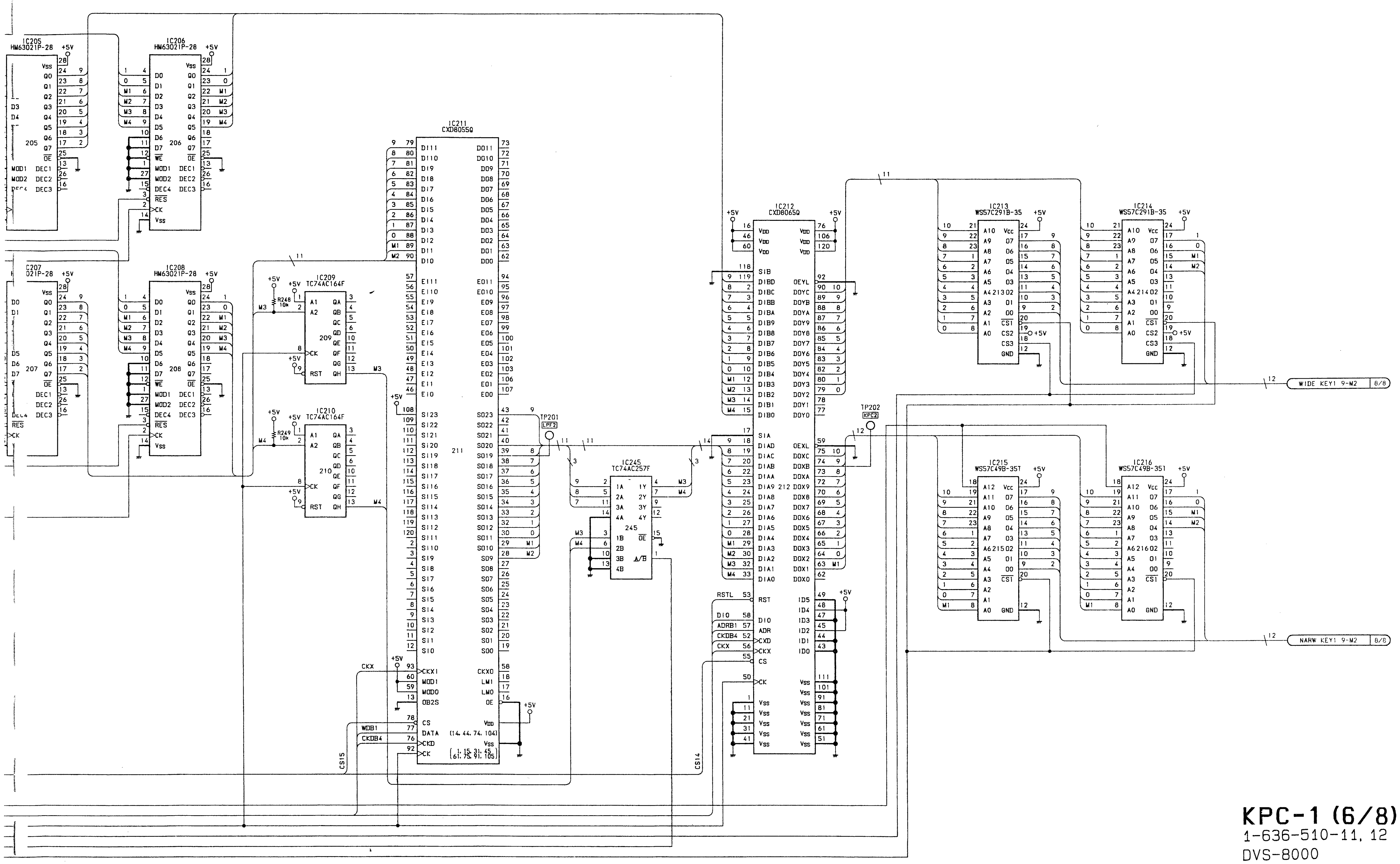
4

5



3/8 MSK2 9-M4
1/8 SYDL-MSK2
3/8 KEY2 9-M4
1/8 SELF KEY2
2/8 MEFL2 9-0
1/8 SYDL-KEY2
2/8 HFCK 9
1/8 CS-E
1/8 SOFT LIMIT 2
1/8 SERIAL
1/8 HFCK2
1/8 PATERN KEY2
1/8 THRW KEY2
1/8 DLV BLK
IC201 TC74AC541F
IC202 TC74AC541F
IC203 TC74AC541F
IC204 TC74AC541F
IC41 TC74AC540F
IC205 HM63021P-28
IC206 HM63021P-28
IC207 HM63021P-28
IC208 HM63021P-28
IC209 TC74AC164F
IC210 TC74AC164F
R248 10k
R249 10k
IC211 CXD8055Q
IC212 CXD8065Q
IC245 TC74AC257F
TP201 LPF3
TP202 KPC2
+5V
M8
L6
M3
M4
CKX
WDB1
CKDB4
CS15
CS14
RSTL
DI0
ADRB1
CKDB4
CKX

A | B | C | D | E | F | G | H


IC205
HM63021P-28
IC206
HM63021P-28
IC207
IC208
HM63021P-28
IC209
TC74AC164F
IC210
TC74AC164F
R248 10k
R249 10k
IC211
CXD8055Q
IC212
CXD8065Q
IC213
WS57C291B-35
IC214
WS57C291B-35
IC215
WS57C49B-35T
IC216
WS57C49B-35T
IC245
TC74AC257F
TP201
LPF2
TP202
KPC2
+5V
CKX
WDB1
CKDB4
CS15
CS14
RSTL
DIO
ADRB1
CKDB4
CKX
M1
M2
M3
M4
WIDE KEY1 9-M2
8/8
NARW KEY1 9-M2
8/8

KPC-1 (6/8)
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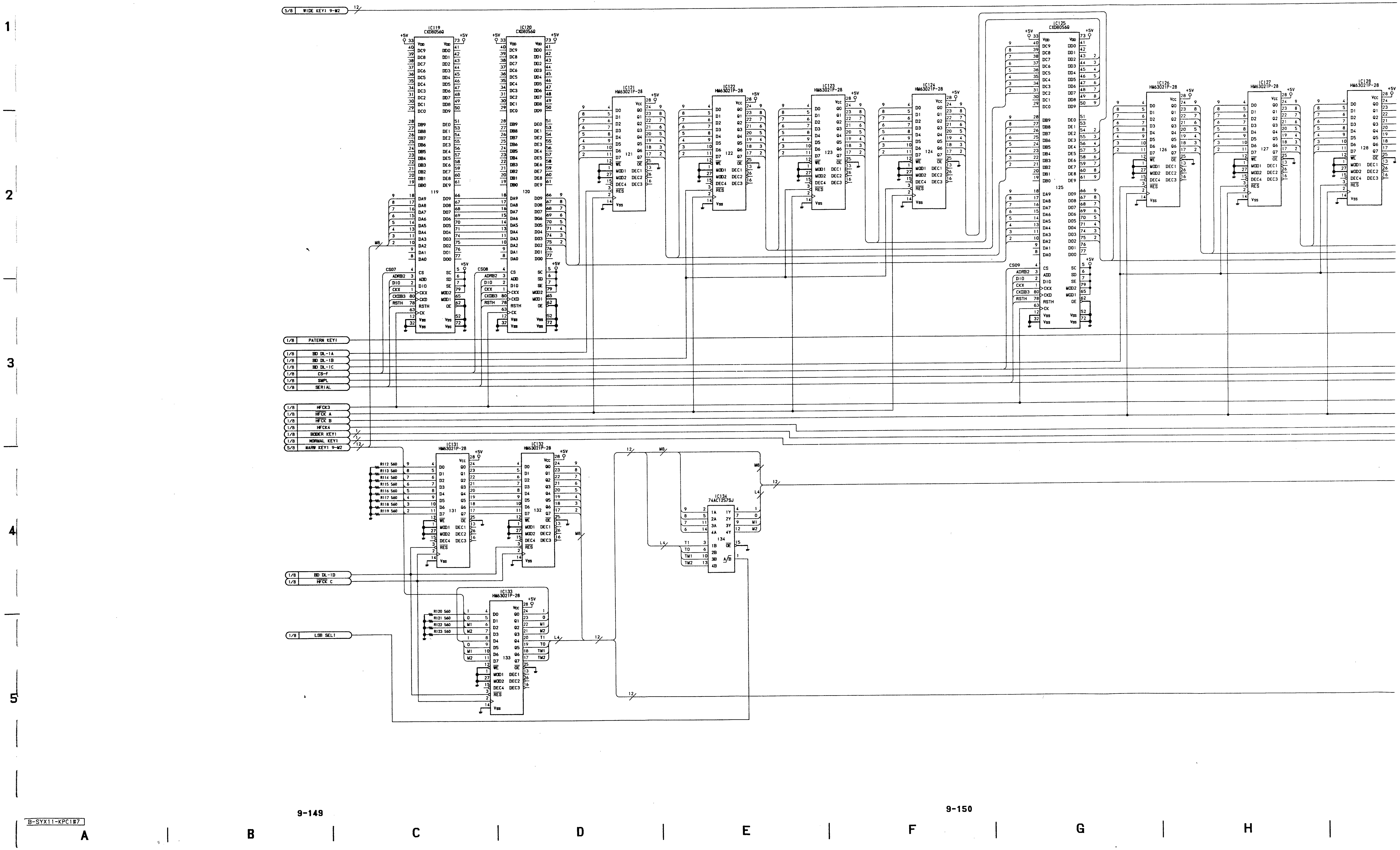
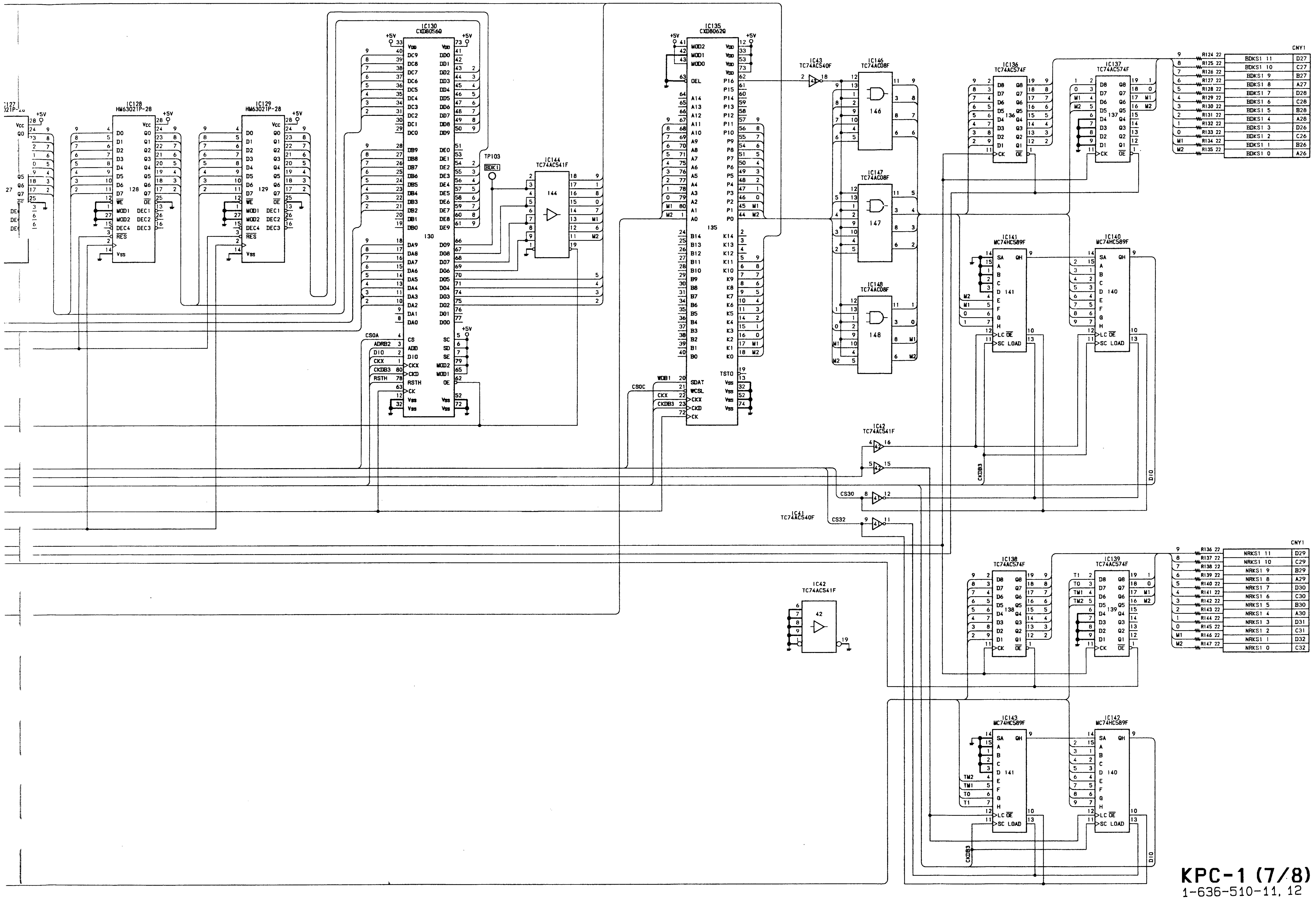
KPC-1 (7/8) KEY PROCESSOR BOARD


5/8 WIDE KEY1 9-M2
IC119 CXD8056Q
IC120 CXD8056Q
IC121 HM63021P-28
IC122 HM63021P-28
IC123 HM63021P-28
IC124 HM63021P-28
IC125 CXD8056Q
IC126 HM63021P-28
IC127 HM63021P-28
IC128 HM63021P-28
CS07
CS08
CS09
ADRB2
DIO
CKX
CKDB3
RSTH
+5V
M8
1/8 PATERN KEY1
1/8 BD DL-1A
1/8 BD DL-1B
1/8 BD DL-1C
1/8 CS-F
1/8 SMPL
1/8 SERIAL
1/8 HFCK3
1/8 HFCK A
1/8 HFCK B
1/8 HFCK4
1/8 BODER KEY1
1/8 NORMAL KEY1
5/8 NARW KEY1 9-M2
IC131 HM63021P-28
IC132 HM63021P-28
IC133 HM63021P-28
IC134 74AC125SJ
R112 560
R113 560
R114 560
R115 560
R116 560
R117 560
R118 560
R119 560
R120 560
R121 560
R122 560
R123 560
1/8 BD DL-1D
1/8 HFCK C
1/8 LSB SEL1
L4
M8
12
T1
T0
TM1
TM2
M1
M2
1
2
3
4
5
A
B
C
D
E
F
G
H

B-SYX11-KPC1#7


IC128 HM63021P-28
IC129 HM63021P-28
IC130 CXD8056Q
IC135 CXD8062Q
TP103 BDK1
IC144 TC74AC541F
IC43 TC74AC540F
IC146 TC74AC08F
IC147 TC74AC08F
IC148 TC74AC08F
IC136 TC74AC574F
IC137 TC74AC574F
IC141 MC74HC589F
IC140 MC74HC589F
IC42 TC74AC541F
IC41 TC74AC540F
IC42 TC74AC541F
IC138 TC74AC574F
IC139 TC74AC574F
IC143 MC74HC589F
IC142 MC74HC589F
CNY1
BDKS1 11
BDKS1 10
BDKS1 9
BDKS1 8
BDKS1 7
BDKS1 6
BDKS1 5
BDKS1 4
BDKS1 3
BDKS1 2
BDKS1 1
BDKS1 0
NRKS1 11
NRKS1 10
NRKS1 9
NRKS1 8
NRKS1 7
NRKS1 6
NRKS1 5
NRKS1 4
NRKS1 3
NRKS1 2
NRKS1 1
NRKS1 0
CS0A
ADRB2
DIO
CKX
CKDB3
RSTH
CS0C
WDB1
CS30
CS32
M1
M2
TM1
TM2
T0
T1
+5V
I
J
K
L
M
N
O
P

KPC-1 (7/8)

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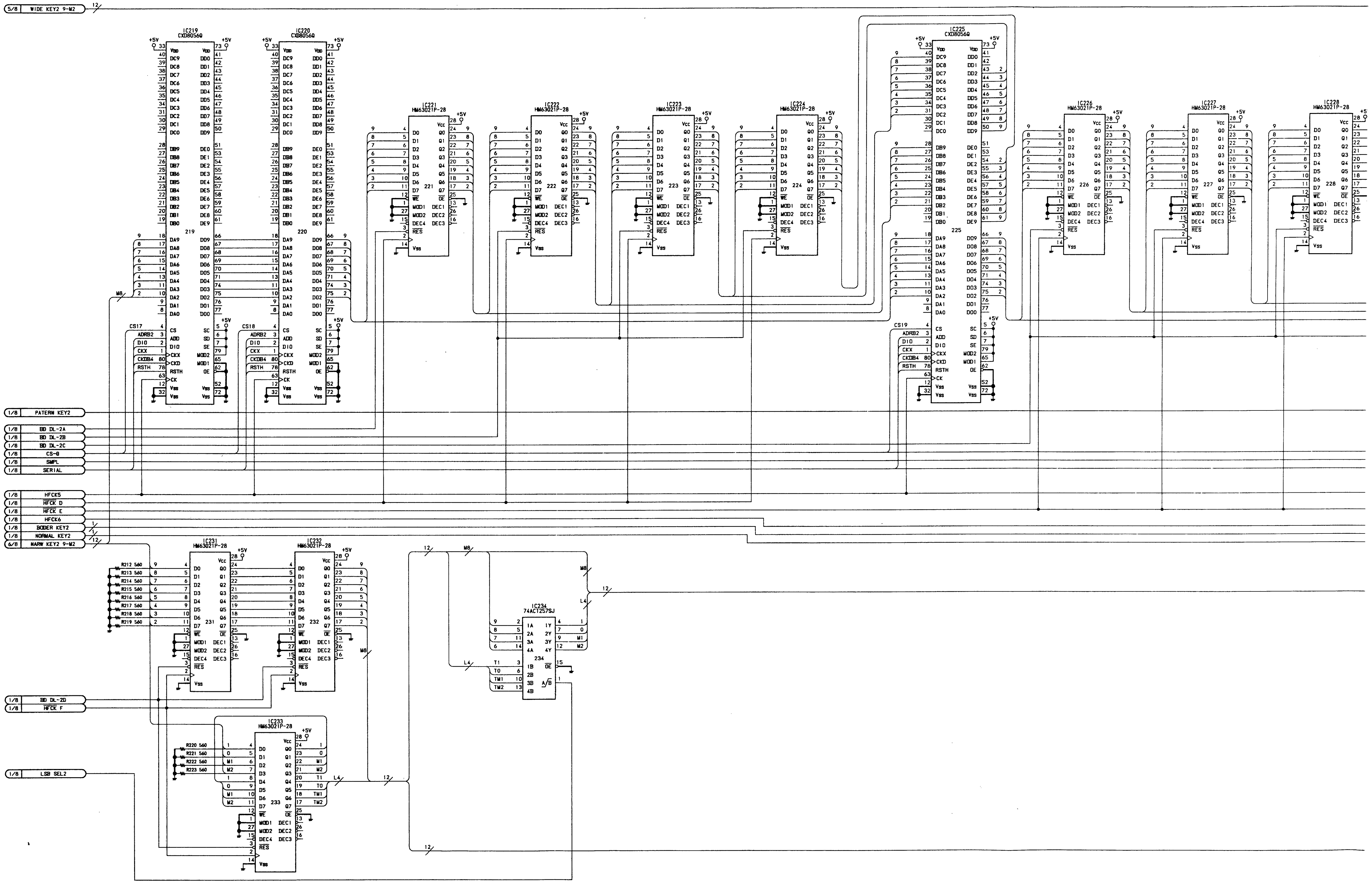
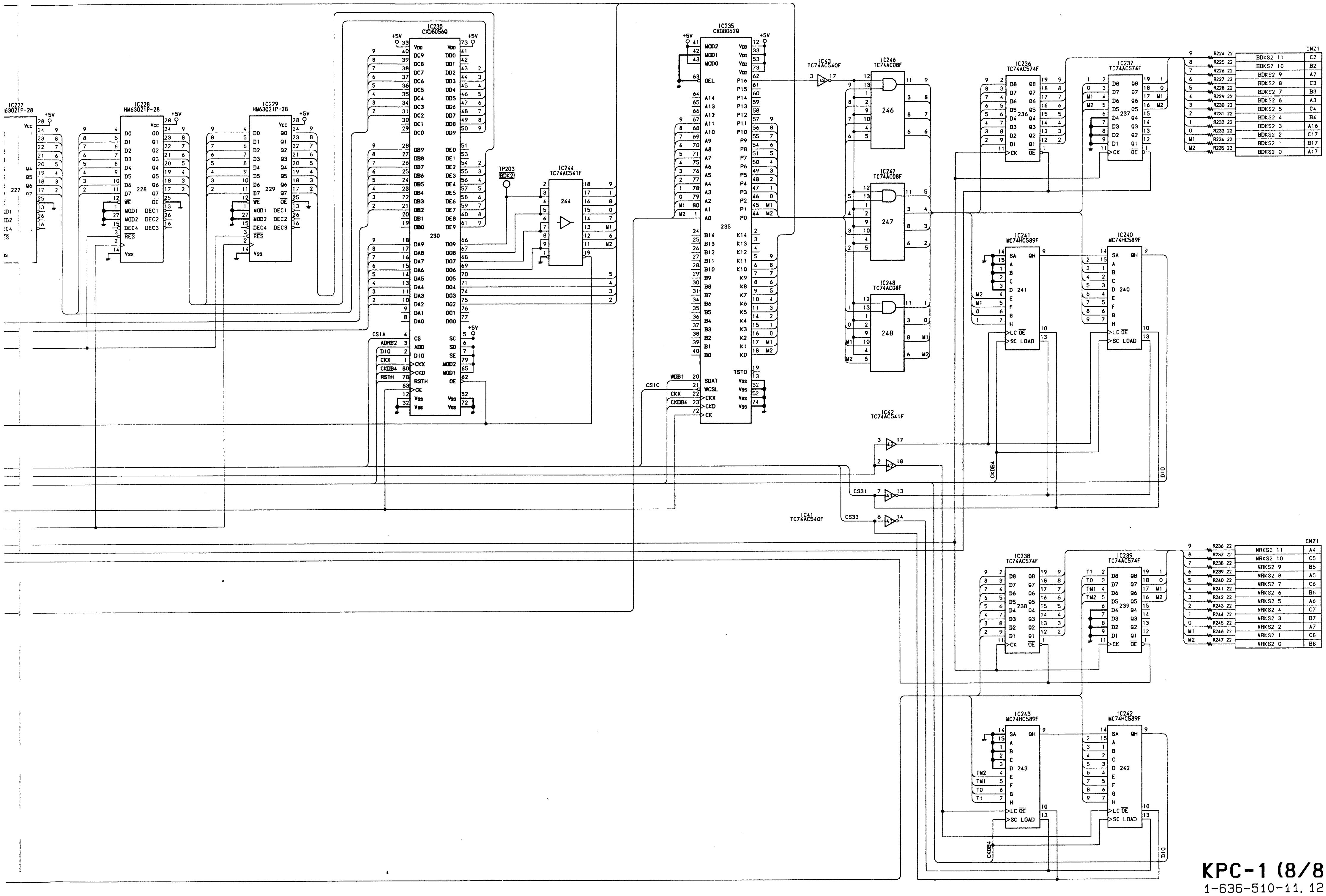
KPC-1 (8/8) KEY PROCESSOR BOARD


5/8 WIDE KEY2 9-M2
IC219 CXD8056Q
IC220 CXD8056Q
IC221 HM63021P-28
IC222 HM63021P-28
IC223 HM63021P-28
IC224 HM63021P-28
IC225 CXD8056Q
IC226 HM63021P-28
IC227 HM63021P-28
IC228 HM63021P-28
CS17
CS18
CS19
1/8 PATERN KEY2
1/8 BD DL-2A
1/8 BD DL-2B
1/8 BD DL-2C
1/8 CS-B
1/8 SMPL
1/8 SERIAL
1/8 HFCK5
1/8 HFCK D
1/8 HFCK E
1/8 HFCK6
1/8 BODER KEY2
1/8 NORMAL KEY2
6/8 NARW KEY2 9-M2
IC231 HM63021P-28
IC232 HM63021P-28
R212 560
R213 560
R214 560
R215 560
R216 560
R217 560
R218 560
R219 560
IC234 74ACT257SJ
1/8 BD DL-2D
1/8 HFCK F
IC233 HM63021P-28
R220 560
R221 560
R222 560
R223 560
1/8 LSB SEL2
1
2
3
4
5
A
B
C
D
E
F
G
H


IC227
HM63021P-28
IC228
HM63021P-28
IC229
HM63021P-28
IC230
CXD8056Q
IC235
CXD8062Q
TP203
BDK2
IC244
TC74AC541F
IC43
TC74AC540F
IC246
TC74AC08F
IC247
TC74AC08F
IC248
TC74AC08F
IC236
TC74AC574F
IC237
TC74AC574F
IC241
MC74HC589F
IC240
MC74HC589F
IC42
TC74AC541F
IC41
TC74AC540F
IC238
TC74AC574F
IC239
TC74AC574F
IC243
MC74HC589F
IC242
MC74HC589F
CNZ1
BDKS2 11
BDKS2 10
BDKS2 9
BDKS2 8
BDKS2 7
BDKS2 6
BDKS2 5
BDKS2 4
BDKS2 3
BDKS2 2
BDKS2 1
BDKS2 0
NRKS2 11
NRKS2 10
NRKS2 9
NRKS2 8
NRKS2 7
NRKS2 6
NRKS2 5
NRKS2 4
NRKS2 3
NRKS2 2
NRKS2 1
NRKS2 0
CS1A
CS1C
CS31
CS33
CXDB4
DIO
CKX
RSTH
+5V

KPC-1 (8/8)
1-636-510-11, 12
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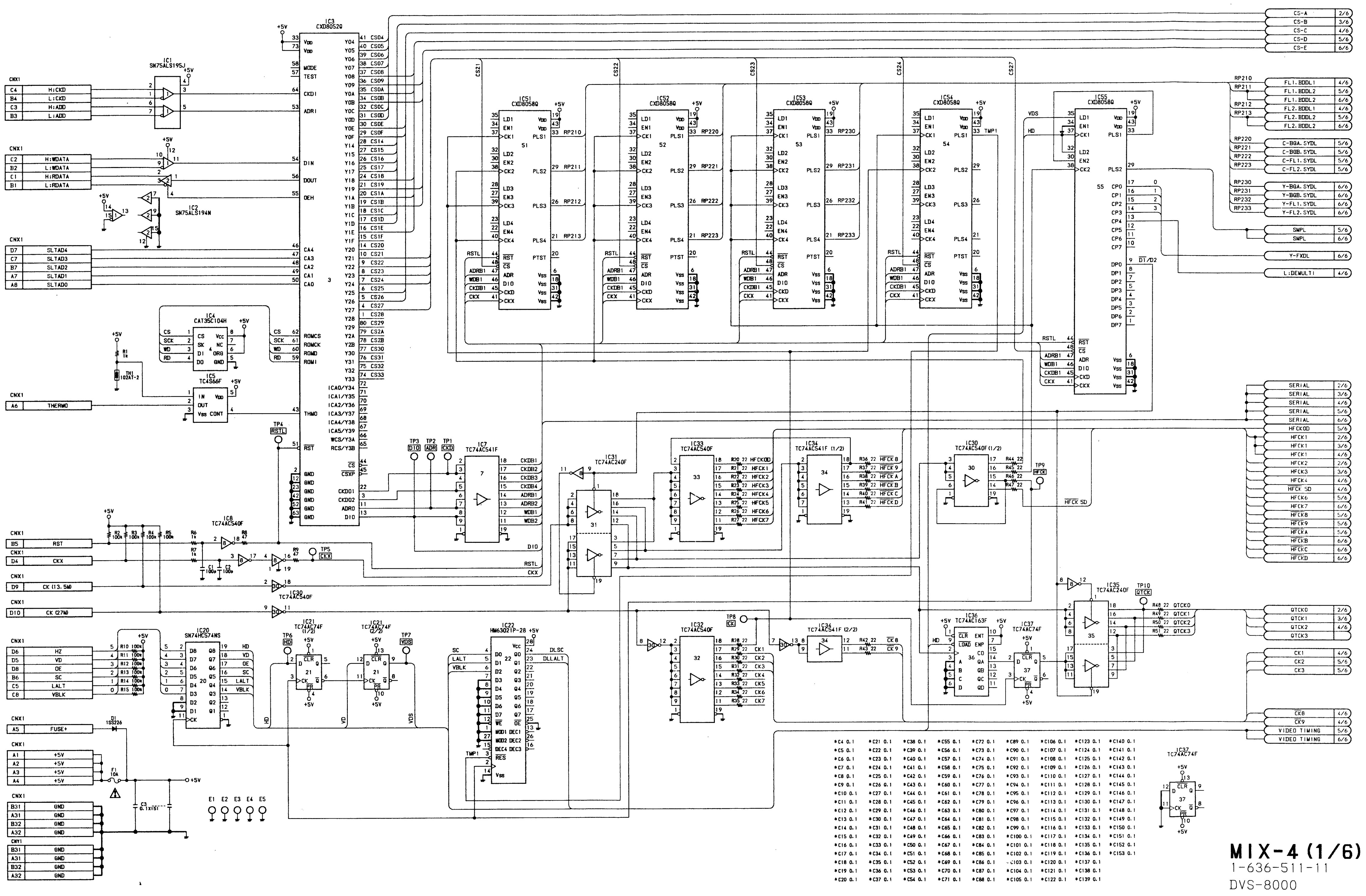
MIX-4 (1/6) MIXER BOARD

S/N: 10001 through 10030


IC1 SN75ALS195J
IC2 SN75ALS194N
IC3 CXD8052Q
IC4 CAT35C104H
IC5 TC4S66F
IC6 TC74AC540F
IC7 TC74AC541F
IC20 SN74HC574NS
IC21 TC74AC74F
IC22 HM63021P-28
IC30 TC74AC540F
IC31 TC74AC240F
IC32 TC74AC540F
IC33 TC74AC540F
IC34 TC74AC541F
IC35 TC74AC240F
IC36 TC74AC163F
IC37 TC74AC74F
IC51 CXD8058Q
IC52 CXD8058Q
IC53 CXD8058Q
IC54 CXD8058Q
IC55 CXD8058Q
CNX1
CNY1
THERMO
FUSE+
+5V
GND
RST
CKX
CK (13.5M)
CK (27M)
CS-A
CS-B
CS-C
CS-D
CS-E
SERIAL
HFCK0D
QTCK0
QTCK1
QTCK2
QTCK3
CK1
CK2
CK3
CK8
CK9
VIDEO TIMING
SMPL
Y-FXDL
L:DEMULTI
E1 E2 E3 E4 E5
1
2
3
4
5
A
B
C
D
E
F
G
H

MIX-4 (1/6)
1-636-511-11
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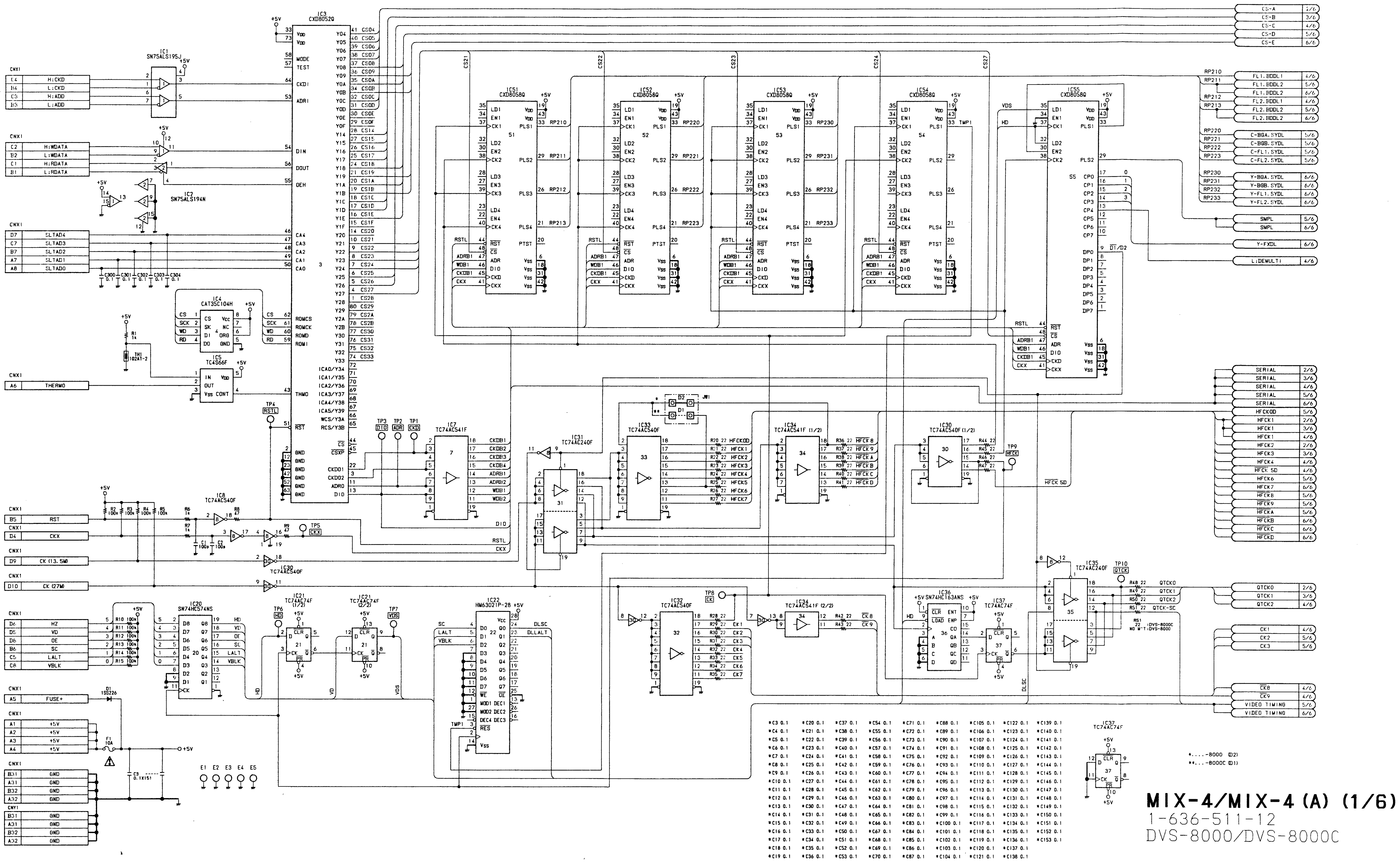
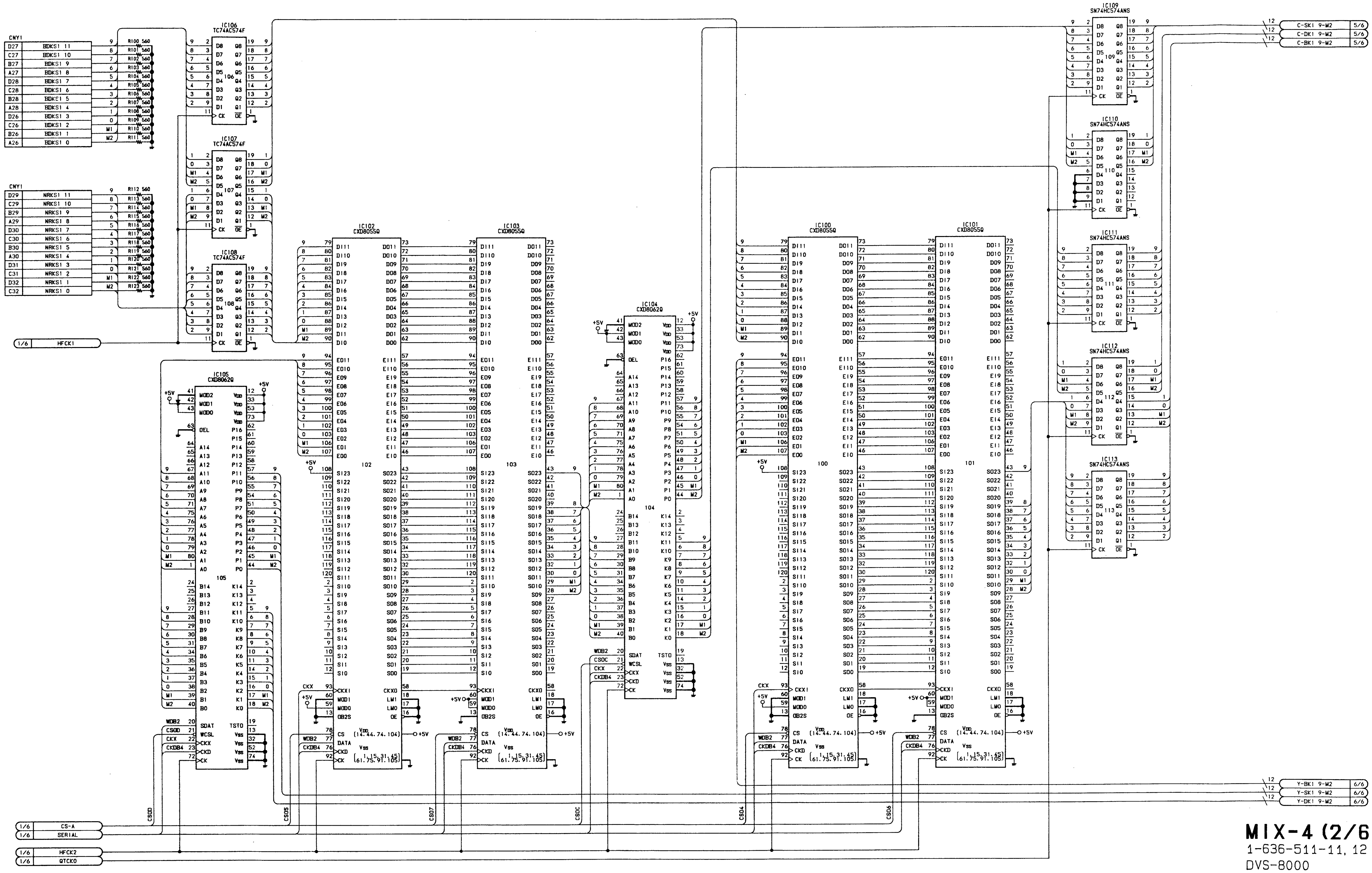
MIX-4/MIX-4 (A) MIXER BOARD S/N; 10031 and higher



1
2
3
4
5
IC3 CXD8052Q
IC1 SN75ALS195J
IC2 SN75ALS194N
IC4 CAT35C104H
IC5 TC4S66F
IC51 CXD8058Q
IC52 CXD8058Q
IC53 CXD8058Q
IC54 CXD8058Q
IC55 CXD8058Q
IC7 TC74AC541F
IC8 TC74AC540F
IC30 TC74AC540F
IC31 TC74AC240F
IC33 TC74AC540F
IC34 TC74AC541F (1/2)
IC34 TC74AC541F (2/2)
IC32 TC74AC540F
IC35 TC74AC240F
IC36 SN74HC163ANS
IC37 TC74AC74F
IC20 SN74HC574NS
IC21 TC74AC74F (1/2)
IC21 TC74AC74F (2/2)
IC22 HM63021P-28
CNX1
H:CKD
L:CKD
H:ADD
L:ADD
H:WDATA
L:WDATA
H:RDATA
L:RDATA
SLTAD4
SLTAD3
SLTAD2
SLTAD1
SLTAD0
THERMO
RST
CKX
CK (13.5M)
CK (27M)
HZ
VD
OE
SC
LALT
VBLK
FUSE+
+5V
GND
CS-A 1/6
CS-B 3/6
CS-C 4/6
CS-D 5/6
CS-E 6/6
FL1.BDDL1 4/6
FL1.BDDL2 5/6
FL1.BDDL2 6/6
FL2.BDDL1 4/6
FL2.BDDL2 5/6
FL2.BDDL2 6/6
C-BGA.SYDL 5/6
C-BGB.SYDL 5/6
C-FL1.SYDL 5/6
C-FL2.SYDL 5/6
Y-BGA.SYDL 6/6
Y-BGB.SYDL 6/6
Y-FL1.SYDL 6/6
Y-FL2.SYDL 6/6
SMPL 5/6
SMPL 6/6
Y-FXDL 6/6
L:DEMULTI 4/6
SERIAL
HFCK0D
HFCK1
HFCK2
HFCK3
HFCK4
HFCK SD
HFCK6
HFCK7
HFCK8
HFCK9
HFCKA
HFCKB
HFCKC
HFCKD
QTCK0 2/6
QTCK1 3/6
QTCK2 4/6
CK1 4/6
CK2 5/6
CK3 5/6
CK8 4/6
CK9 4/6
VIDEO TIMING 5/6
VIDEO TIMING 6/6
TP1
TP2
TP3
TP4 RSTL
TP5 CKX
TP6 HD
TP7 VDS
TP8 CK
TP9 HFCK
TP10 QTCK
E1 E2 E3 E4 E5
*.....-8000 (D2)
**....-8000C (D1)

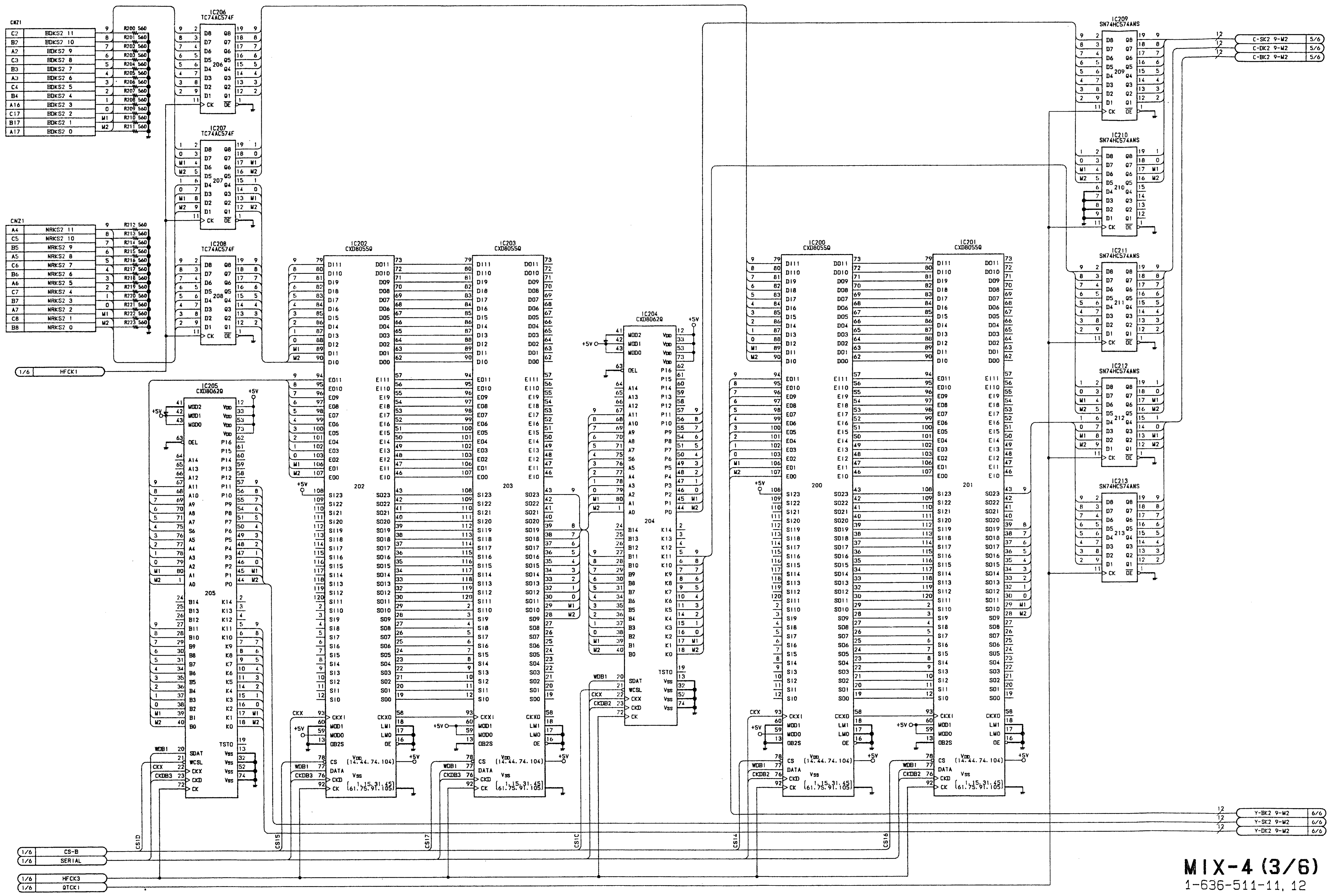
MIX-4/MIX-4 (A) (1/6)
1-636-511-12
DVS-8000/DVS-8000C

MIX-4 (2/6) MIXER BOARD


CNY1
BDKS1 11
BDKS1 10
BDKS1 9
BDKS1 8
BDKS1 7
BDKS1 6
BDKS1 5
BDKS1 4
BDKS1 3
BDKS1 2
BDKS1 1
BDKS1 0
NRKS1 11
NRKS1 10
NRKS1 9
NRKS1 8
NRKS1 7
NRKS1 6
NRKS1 5
NRKS1 4
NRKS1 3
NRKS1 2
NRKS1 1
NRKS1 0
IC106 TC74AC574F
IC107 TC74AC574F
IC108 TC74AC574F
IC105 CXD8062Q
IC102 CXD8055Q
IC103 CXD8055Q
IC104 CXD8062Q
IC100 CXD8055Q
IC101 CXD8055Q
IC109 SN74HC574ANS
IC110 SN74HC574ANS
IC111 SN74HC574ANS
IC112 SN74HC574ANS
IC113 SN74HC574ANS
HFCK1
C-SK1 9-M2
C-DK1 9-M2
C-BK1 9-M2
Y-BK1 9-M2
Y-SK1 9-M2
Y-DK1 9-M2
CS-A
SERIAL
HFCK2
QTCKO
CS03
CS05
CS07
CS0C
CS04
CS06
+5V

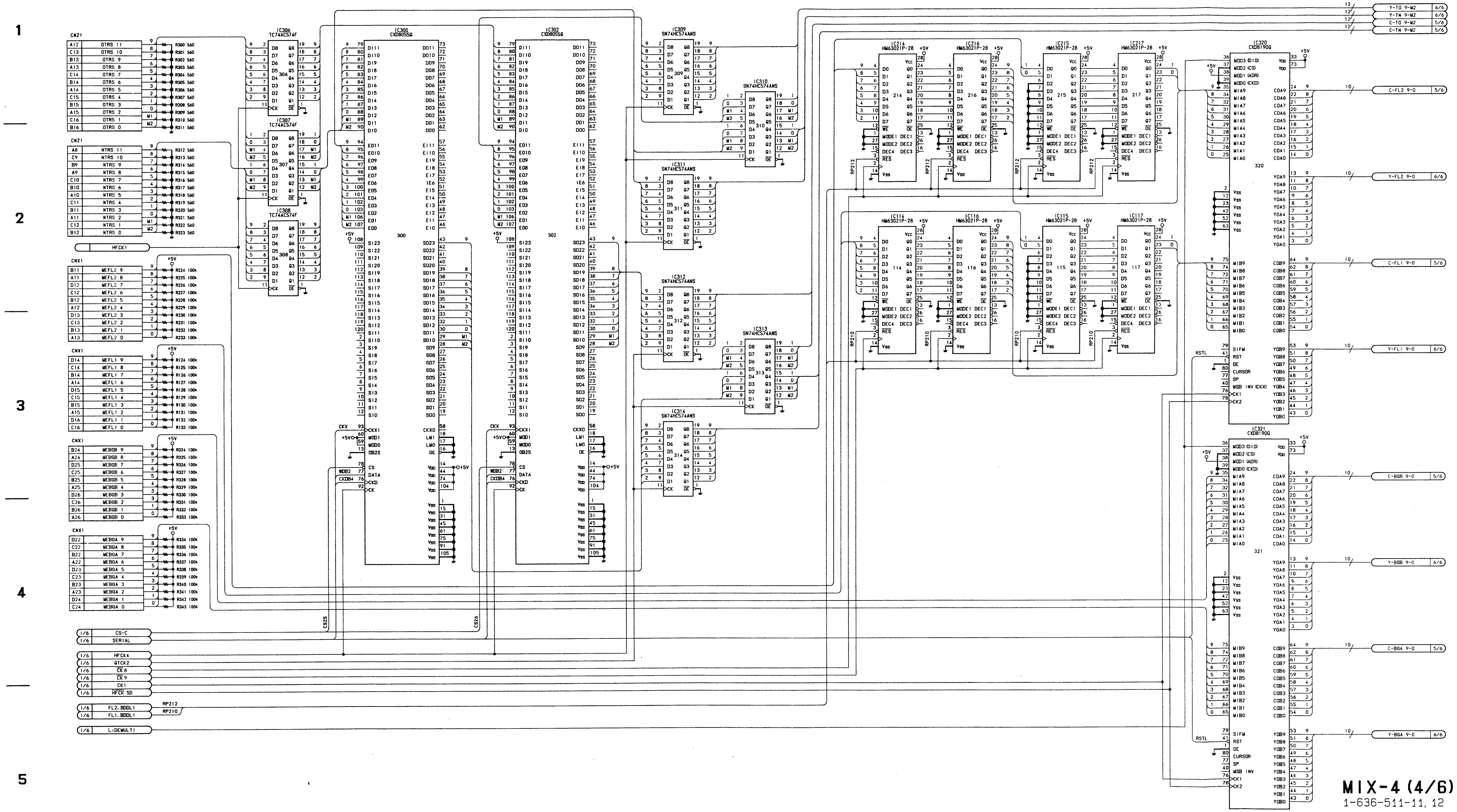
MIX-4 (2/6)
1-636-511-11, 12
DVS-8000

MIX-4 (3/6) MIXER BOARD


1
2
3
4
5
CN21
BDKS2 11
BDKS2 10
BDKS2 9
BDKS2 8
BDKS2 7
BDKS2 6
BDKS2 5
BDKS2 4
BDKS2 3
BDKS2 2
BDKS2 1
BDKS2 0
NRKS2 11
NRKS2 10
NRKS2 9
NRKS2 8
NRKS2 7
NRKS2 6
NRKS2 5
NRKS2 4
NRKS2 3
NRKS2 2
NRKS2 1
NRKS2 0
IC206 TC74AC574F
IC207 TC74AC574F
IC208 TC74AC574F
IC205 CXD8062Q
IC202 CXD8055Q
IC203 CXD8055Q
IC204 CXD8062Q
IC200 CXD8055Q
IC201 CXD8055Q
IC209 SN74HC574ANS
IC210 SN74HC574ANS
IC211 SN74HC574ANS
IC212 SN74HC574ANS
IC213 SN74HC574ANS
1/6 HFCK1
1/6 CS-B
1/6 SERIAL
1/6 HFCK3
1/6 BTCK1
C-SK2 9-M2 5/6
C-DK2 9-M2 5/6
C-BK2 9-M2 5/6
Y-BK2 9-M2 6/6
Y-SK2 9-M2 6/6
Y-DK2 9-M2 6/6
CS1D
CS15
CS17
CS1C
CS14
CS16
WDB1
CKX
CKDB3
CKDB2
+5V
(14, 44, 74, 104)
(1, 15, 31, 45, 61, 75, 91, 105)

MIX-4 (3/6)
1-636-511-11, 12
DVS-8000

MIX-4 (4/6) MIXER BOARD


1
2
3
4
5
CNZ1
OTRS 11
OTRS 10
OTRS 9
OTRS 8
OTRS 7
OTRS 6
OTRS 5
OTRS 4
OTRS 3
OTRS 2
OTRS 1
OTRS 0
NTRS 11
NTRS 10
NTRS 9
NTRS 8
NTRS 7
NTRS 6
NTRS 5
NTRS 4
NTRS 3
NTRS 2
NTRS 1
NTRS 0
HFCK1
CNX1
MEFL2 9
MEFL2 0
MEFL1 9
MEFL1 0
MEBGB 9
MEBGB 0
MEBGA 9
MEBGA 0
IC306 TC74AC574F
IC307 TC74AC574F
IC308 TC74AC574F
IC300 CXD8055Q
IC302 CXD8055Q
IC309 SN74HC574ANS
IC310 SN74HC574ANS
IC311 SN74HC574ANS
IC312 SN74HC574ANS
IC313 SN74HC574ANS
IC314 SN74HC574ANS
IC214 HM63021P-28
IC216 HM63021P-28
IC215 HM63021P-28
IC217 HM63021P-28
IC114 HM63021P-28
IC116 HM63021P-28
IC115 HM63021P-28
IC117 HM63021P-28
IC320 CXD8190Q
IC321 CXD8190Q
+5V
RP212
RP210
RSTL
CB25
CB26
1/6 CS-C
1/6 SERIAL
1/6 HFCK4
1/6 GTCK2
1/6 CK8
1/6 CK9
1/6 CK1
1/6 HFCK SD
1/6 FL2.BODL1
1/6 FL1.BODL1
1/6 L:DEMULT1
Y-TO 9-M2 6/6
Y-TN 9-M2 6/6
C-TO 9-M2 5/6
C-TN 9-M2 5/6
C-FL2 9-0 5/6
Y-FL2 9-0 6/6
C-FL1 9-0 5/6
Y-FL1 9-0 6/6
C-BGB 9-0 5/6
Y-BGB 9-0 6/6
C-BGA 9-0 5/6
Y-BGA 9-0 6/6

MIX-4 (4/6)
1-636-511-11, 12
DVS-8000

B-SYX121-MIX4#4

A | B | C | D | E | F | G | H

MIX-4 (5/6) MIXER BOARD

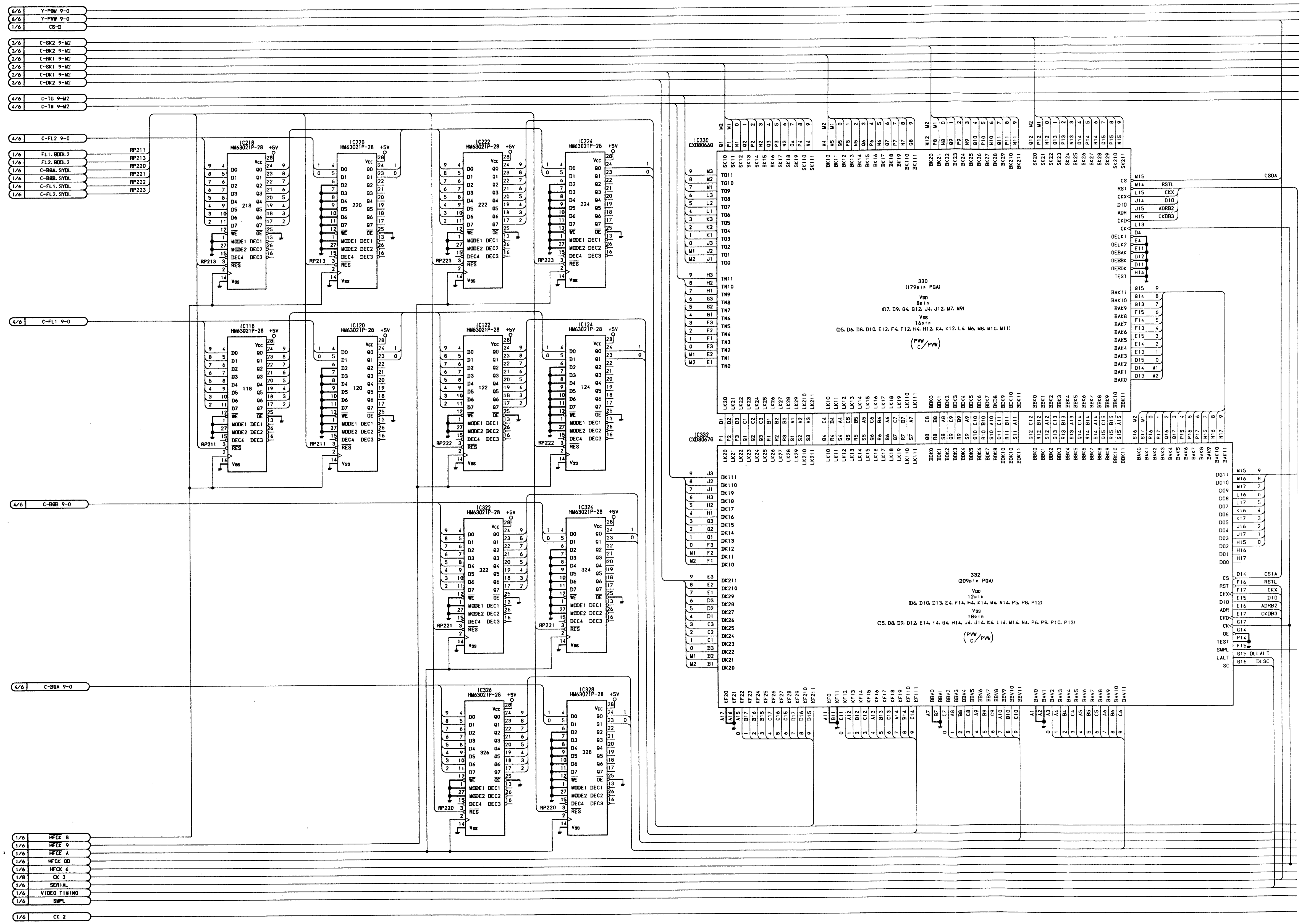
1

2

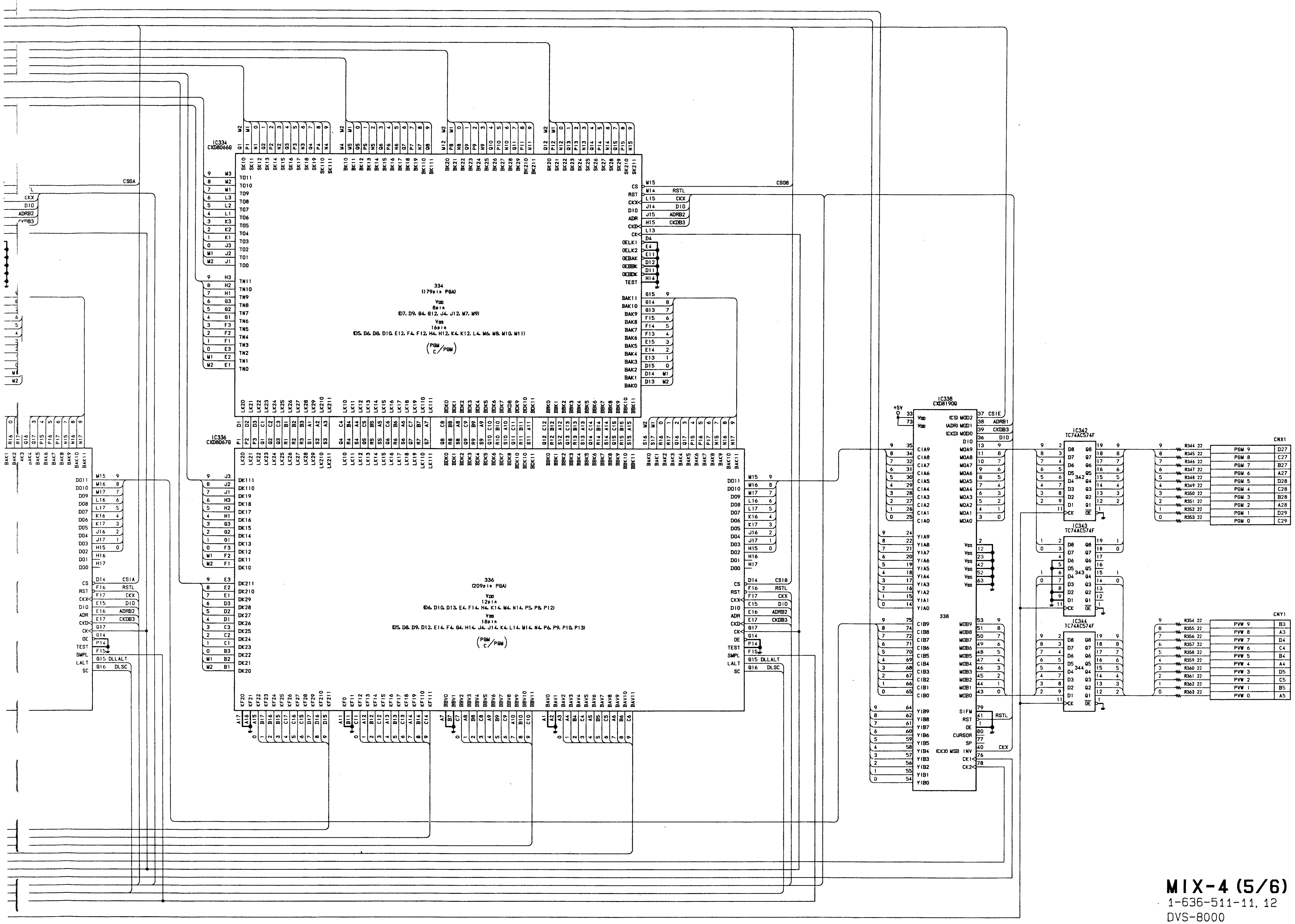
3

4

5


6/6 Y-PGM 9-0
6/6 Y-PVW 9-0
1/6 CS-D
3/6 C-SK2 9-M2
3/6 C-BK2 9-M2
2/6 C-BK1 9-M2
2/6 C-SK1 9-M2
2/6 C-DK1 9-M2
3/6 C-DK2 9-M2
4/6 C-TO 9-M2
4/6 C-TN 9-M2
4/6 C-FL2 9-0
1/6 FL1.BDDL2
1/6 FL2.BDDL2
1/6 C-BGA.SYDL
1/6 C-BGB.SYDL
1/6 C-FL1.SYDL
1/6 C-FL2.SYDL
RP211
RP213
RP220
RP221
RP222
RP223
4/6 C-FL1 9-0
4/6 C-BGB 9-0
4/6 C-BGA 9-0
IC218 HM63021P-28
IC220 HM63021P-28
IC222 HM63021P-28
IC224 HM63021P-28
IC118 HM63021P-28
IC120 HM63021P-28
IC122 HM63021P-28
IC124 HM63021P-28
IC322 HM63021P-28
IC324 HM63021P-28
IC326 HM63021P-28
IC328 HM63021P-28
+5V
IC330 CXD8066Q
330 (179pin PGA)
Vdd 8pin (D7, D9, G4, G12, J4, J12, M7, M9)
Vss 16pin (D5, D6, D8, D10, E12, F4, F12, H4, H12, K4, K12, L4, M6, M8, M10, M11)
(PVW/C/PVW)
IC332 CXD8067Q
332 (209pin PGA)
Vdd 12pin (D6, D10, D13, E4, F14, H4, K14, M4, N14, P5, P8, P12)
Vss 18pin (D5, D8, D9, D12, E14, F4, G4, H14, J4, J14, K4, L14, M14, N4, P6, P9, P10, P13)
(PVW/C/PVW)
CSDA
RSTL
CKX
D10
ADRB2
CKDB3
CS1A
DLLALT
DLSC
1/6 HFCK 8
1/6 HFCK 9
1/6 HFCK A
1/6 HFCK 0D
1/6 HFCK 6
1/8 CK 3
1/6 SERIAL
1/6 VIDEO TIMING
1/6 SMPL
1/6 CK 2

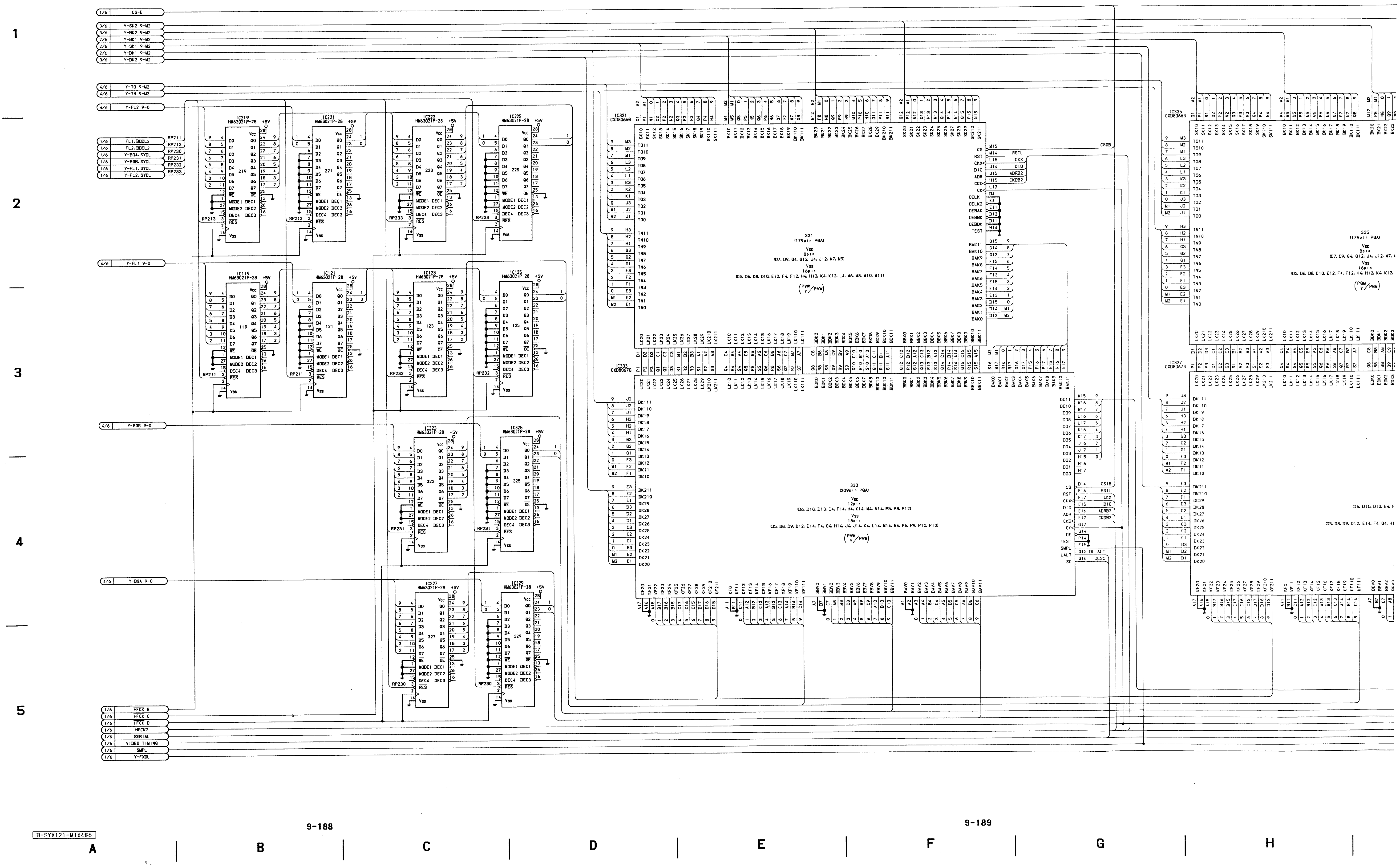
A | B | C | D | E | F | G | H


IC334
CXD8066Q
334
(179pin PGA)
VDD
8pin
(C7, D9, G4, G12, J4, J12, M7, M9)
VSS
16pin
(D5, D6, D8, D10, E12, F4, F12, H4, H12, K4, K12, L4, M6, M8, M10, M11)
(PGM/C/PGM)
IC336
CXD8067Q
336
(209pin PGA)
VDD
12pin
(D6, D10, D13, E4, F14, H4, K14, M4, N14, P5, P8, P12)
VSS
18pin
(D5, D8, D9, D12, E14, F4, G4, H14, J4, J14, K4, L14, M14, N4, P6, P9, P10, P13)
(PGM/C/PGM)
CSOA
CSOB
CS1A
CS1B
CS1E
CKX
D10
ADRB2
CKDB3
RSTL
DLLALT
DLSC
IC338
CXD8190Q
+5V
338
IC342
TC74AC574F
IC343
TC74AC574F
IC344
TC74AC574F
CNX1
CNY1
PGM 9
PGM 8
PGM 7
PGM 6
PGM 5
PGM 4
PGM 3
PGM 2
PGM 1
PGM 0
PVW 9
PVW 8
PVW 7
PVW 6
PVW 5
PVW 4
PVW 3
PVW 2
PVW 1
PVW 0

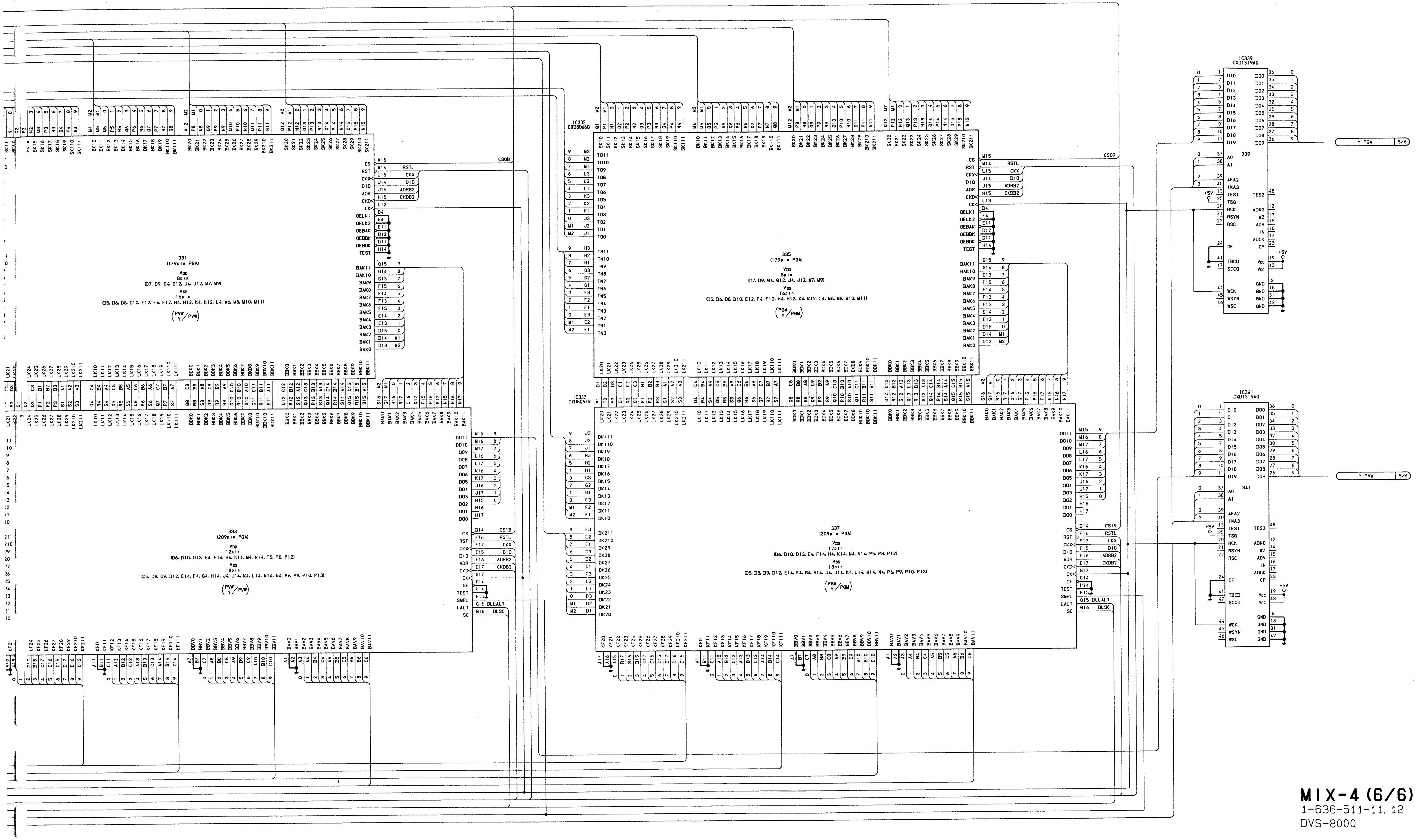
MIX-4 (5/6)

1-636-511-11, 12
DVS-8000

MIX-4 (6/6) MIXER BOARD


1
2
3
4
5
A
B
C
D
E
F
G
H
1/6 CS-E
3/6 Y-SK2 9-M2
3/6 Y-BK2 9-M2
2/6 Y-BK1 9-M2
2/6 Y-SK1 9-M2
2/6 Y-DK1 9-M2
3/6 Y-DK2 9-M2
4/6 Y-TO 9-M2
4/6 Y-TN 9-M2
4/6 Y-FL2 9-0
1/6 FL1.BDDL2 RP211
1/6 FL2.BDDL2 RP213
1/6 Y-BGA.SYDL RP230
1/6 Y-BGB.SYDL RP231
1/6 Y-FL1.SYDL RP232
1/6 Y-FL2.SYDL RP233
4/6 Y-FL1 9-0
4/6 Y-BGB 9-0
4/6 Y-BGA 9-0
IC219 HM63021P-28
IC221 HM63021P-28
IC223 HM63021P-28
IC225 HM63021P-28
IC119 HM63021P-28
IC121 HM63021P-28
IC123 HM63021P-28
IC125 HM63021P-28
IC323 HM63021P-28
IC325 HM63021P-28
IC327 HM63021P-28
IC329 HM63021P-28
+5V
IC331 CXD8066Q
331 (179pin PGA)
IC333 CXD8067Q
333 (209pin PGA)
IC335 CXD8066Q
335 (179pin PGA)
IC337 CXD8067Q
(PVW/Y/PVW)
(PGM/Y/PGM)
CSOB
RSTL
CKX
DIO
ADRB2
CKDB2
DLLALT
DLSC
1/6 HFCK B
1/6 HFCK C
1/6 HFCK D
1/6 HFCK7
1/6 SERIAL
1/6 VIDEO TIMING
1/6 SMPL
1/6 Y-FXDL

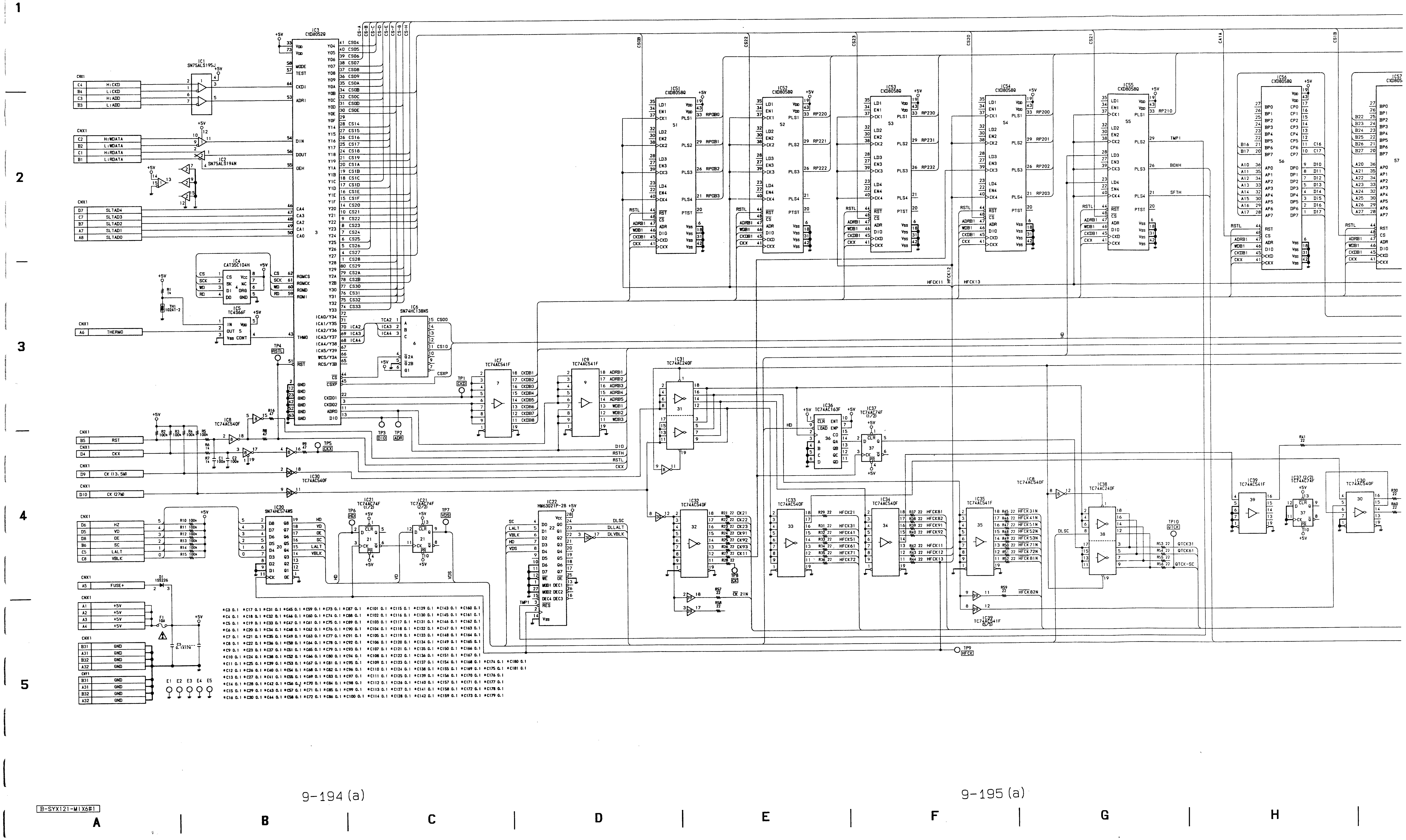
MIX-4 (6/6)


IC335
CXD8066Q
335
(179pin PGA)
IC337
CXD8067Q
337
(209pin PGA)
331
(179pin PGA)
333
(209pin PGA)
(PVW Y/PVW)
(PGM Y/PGM)
IC339
CXD1319AQ
339
IC341
CXD1319AQ
341
Y-PGM
5/6
Y-PVW
5/6
+5V
CS08
CS09
CS18
CS19
E
F
G
H
I
J
K
L

MIX-4 (6/6)
1-636-511-11, 12
DVS-8000

MIX-6 (1/9) DSK (DOWNSTREAM KEYER) BOARD

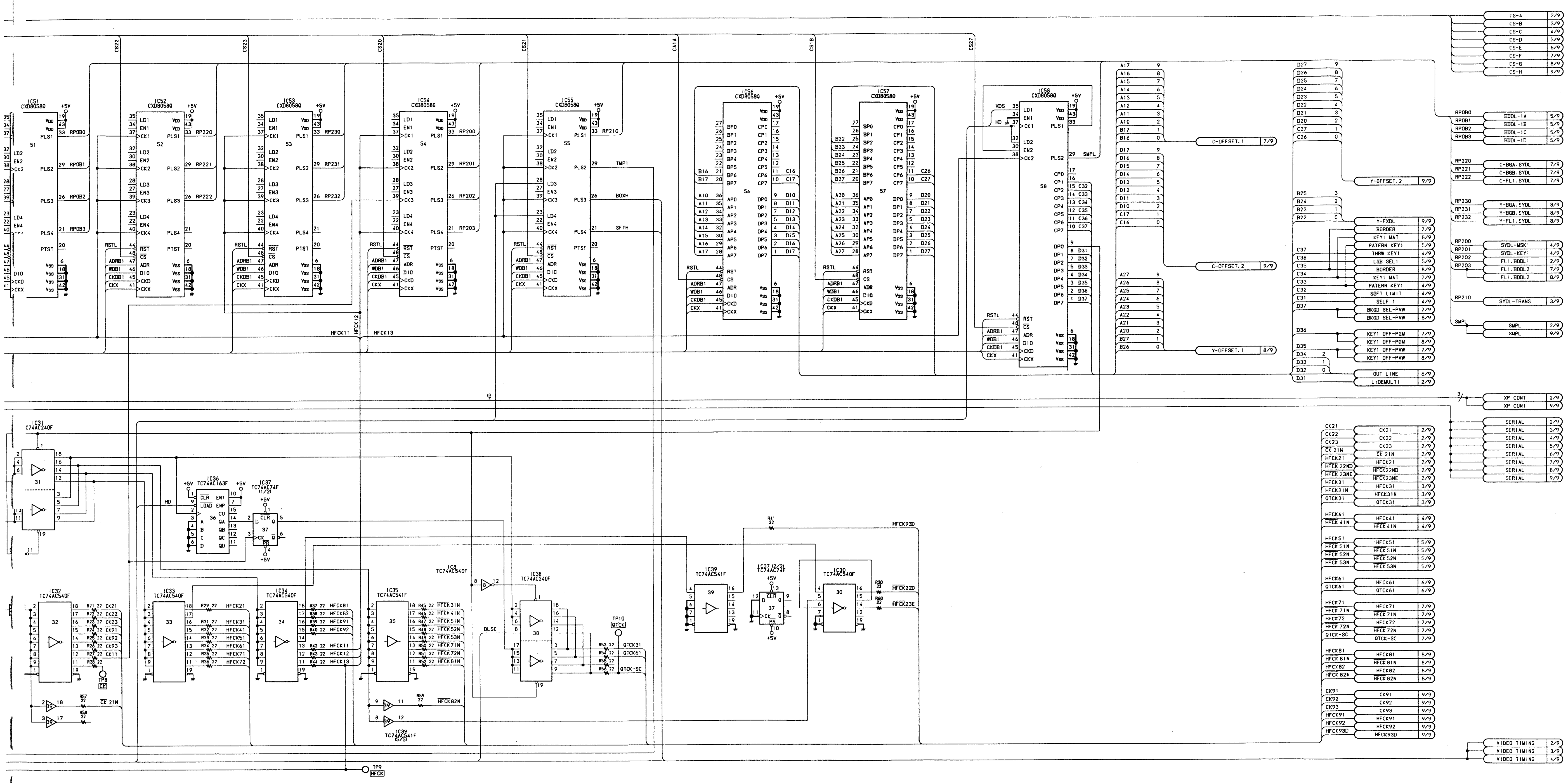
S/N; 10001 through 10030


1
2
3
4
5
IC1 SN75ALS195J
IC2 SN75ALS194N
IC3 CXD8052Q
IC4 CAT35C104H
IC5 TC4S66F
IC6 SN74HC138NS
IC7 TC74AC541F
IC8 TC74AC540F
IC9 TC74AC541F
IC20 SN74HC574NS
IC21 TC74AC74F
IC22 HM63021P-28
IC30 TC74AC540F
IC31 TC74AC240F
IC32 TC74AC540F
IC33 TC74AC540F
IC34 TC74AC540F
IC35 TC74AC541F
IC36 TC74AC163F
IC37 TC74AC74F
IC38 TC74AC240F
IC39 TC74AC541F
IC51 CXD8058Q
IC52 CXD8058Q
IC53 CXD8058Q
IC54 CXD8058Q
IC55 CXD8058Q
IC56 CXD8058Q
IC57 CXD805
CNX1
H:CKD
L:CKD
H:ADD
L:ADD
H:WDATA
L:WDATA
H:RDATA
L:RDATA
SLTAD4
SLTAD3
SLTAD2
SLTAD1
SLTAD0
THERMO
RST
CKX
CK (13.5M)
CK (27M)
HZ
VD
OE
SC
LALT
VBLK
FUSE+
+5V
GND
E1 E2 E3 E4 E5
TP1 CKD
TP2 ADR
TP3 DIO
TP4 RSTL
TP5 CKX
TP6 HD
TP7 VDS
TP8 CK
TP9 HFCK
TP10 QTCK
HFCK11
HFCK13
QTCK31
QTCK61
QTCK-SC
DLSC
DLLALT
DLVBLK
TMP1
BOXH
SFTH

9-194 (a)

9-195 (a)

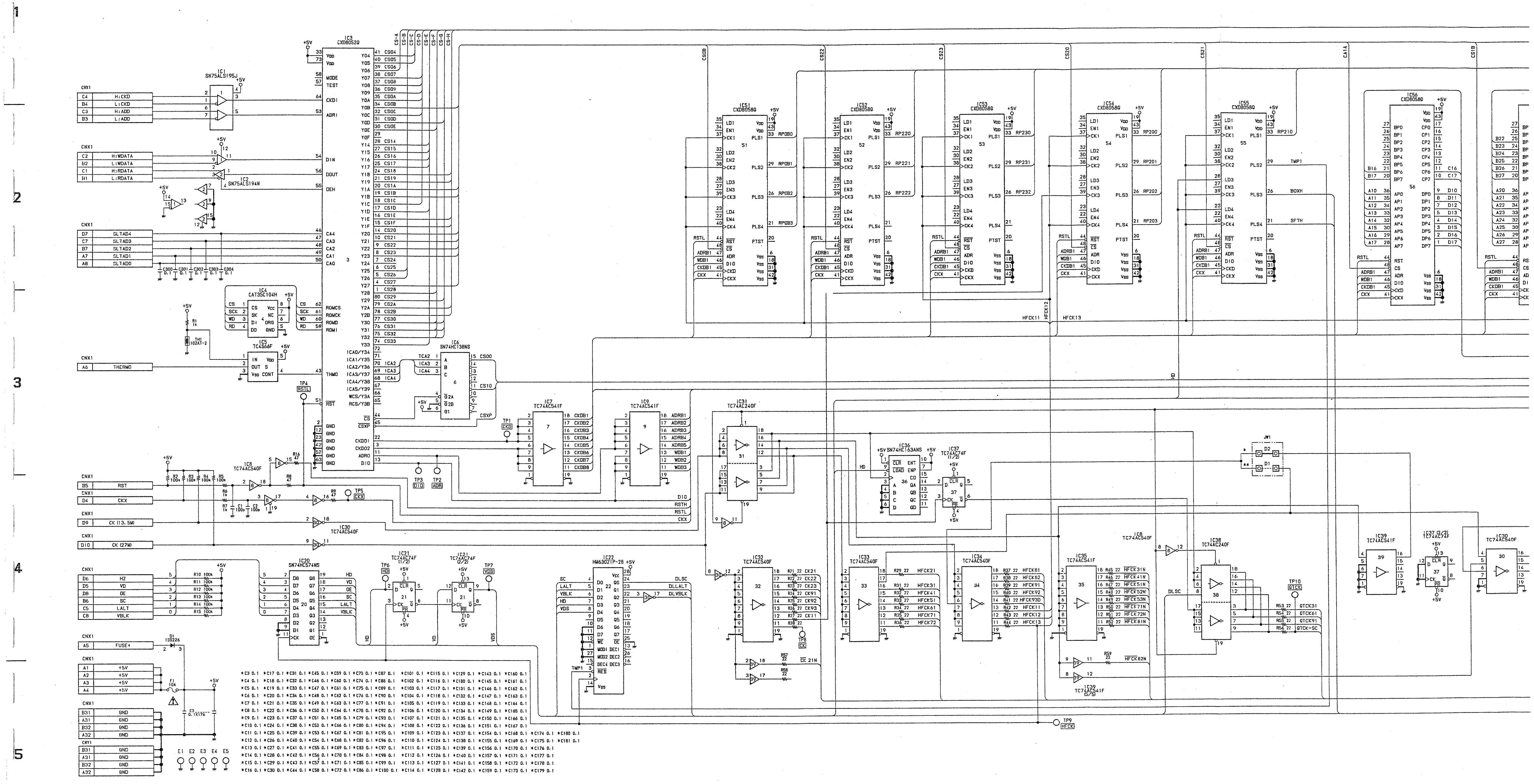
A B C D E F G H

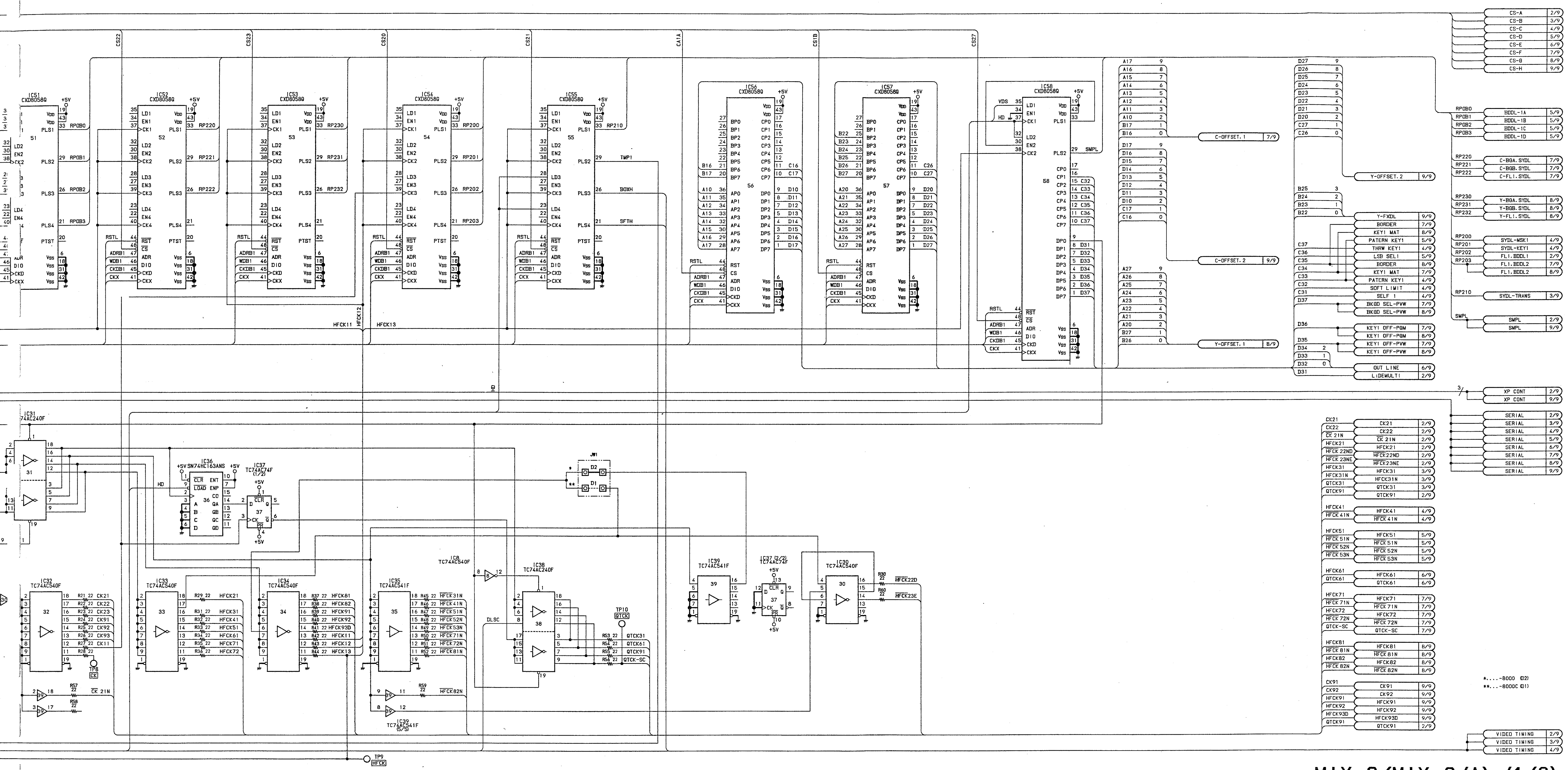

IC51 CXD8058Q
IC52 CXD8058Q
IC53 CXD8058Q
IC54 CXD8058Q
IC55 CXD8058Q
IC56 CXD8058Q
IC57 CXD8058Q
IC58 CXD8058Q
IC31 C74AC240F
IC32 TC74AC540F
IC33 TC74AC540F
IC34 TC74AC540F
IC35 TC74AC541F
IC36 TC74AC163F
IC37 TC74AC74F (1/2)
IC37 TC74AC74F (2/2)
IC38 TC74AC240F
IC39 TC74AC541F
IC30 TC74AC540F
IC8 TC74AC540F
CS22
CS23
CS20
CS21
CA1A
CS1B
CS27
RSTL
ADRB1
WDB1
CKDB1
CKX
HFCK11
HFCK12
HFCK13
HD
DLSC
TMP1
BOXH
SFTH
SMPL
TP8
TP9
HFCK
TP10
QTCK
+5V
CS-A 2/9
CS-B 3/9
CS-C 4/9
CS-D 5/9
CS-E 6/9
CS-F 7/9
CS-G 8/9
CS-H 9/9
BDDL-1A 5/9
BDDL-1B 5/9
BDDL-1C 5/9
BDDL-1D 5/9
C-BGA.SYDL 7/9
C-BGB.SYDL 7/9
C-FL1.SYDL 7/9
Y-BGA.SYDL 8/9
Y-BGB.SYDL 8/9
Y-FL1.SYDL 8/9
SYDL-MSK1 4/9
SYDL-KEY1 4/9
FL1.BDDL1 2/9
FL1.BDDL2 7/9
FL1.BDDL2 8/9
SYDL-TRANS 3/9
SMPL 2/9
SMPL 9/9
C-OFFSET.1 7/9
Y-OFFSET.2 9/9
C-OFFSET.2 9/9
Y-OFFSET.1 8/9
Y-FXDL 9/9
BORDER 7/9
KEY1 MAT 8/9
PATERN KEY1 5/9
THRW KEY1 4/9
LSB SEL1 5/9
BORDER 6/9
KEY1 MAT 4/9
PATERN KEY1 4/9
SOFT LIMIT 4/9
SELF 1 4/9
BKGD SEL-PVW 7/9
BKGD SEL-PVW 8/9
KEY1 OFF-PGM 7/9
KEY1 OFF-PGM 8/9
KEY1 OFF-PVW 7/9
KEY1 OFF-PVW 8/9
OUT LINE 6/9
L:DEMULTI 2/9
XP CONT 2/9
XP CONT 9/9
SERIAL
VIDEO TIMING 2/9
VIDEO TIMING 3/9
VIDEO TIMING 4/9

MIX-6 (1/9)
1-636-512-11
DVS-8000

MIX-6/MIX-6(A) DSK(DOWNSTREAM KEYER) BOARD

S/N; 10031 and higher

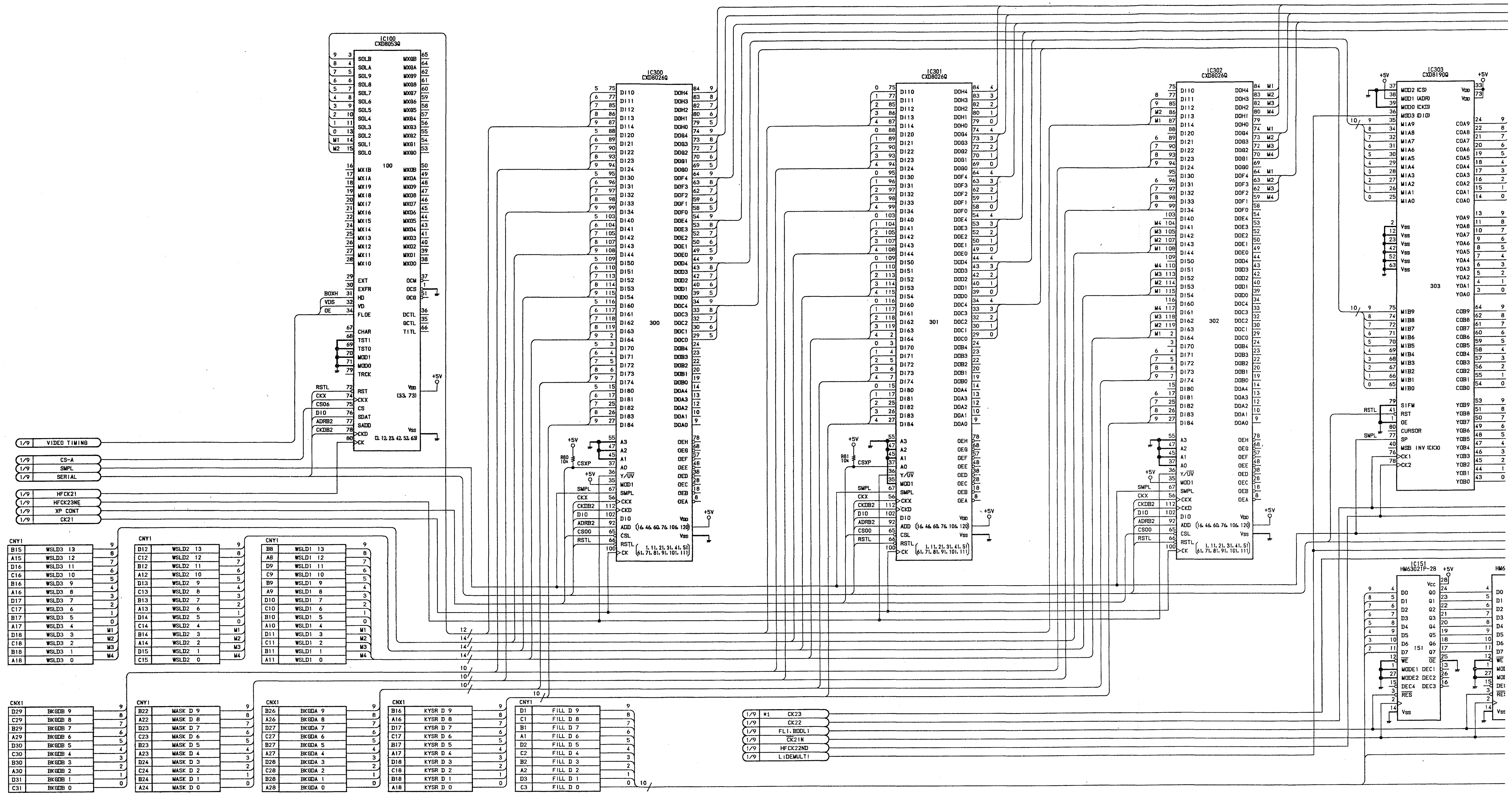

1
2
3
4
5
CNX1
IC1 SN75ALS195J
IC2 SN75ALS194N
IC3 CXD8052Q
IC4 CAT35C104H
IC5 TC4S66F
IC6 SN74HC138NS
IC7 TC74AC541F
IC8 TC74AC540F
IC9 TC74AC541F
IC20 SN74HC574NS
IC21 TC74AC74F
IC22 HM63021P-28
IC30 TC74AC540F
IC31 TC74AC240F
IC32 TC74AC540F
IC33 TC74AC540F
IC34 TC74AC540F
IC35 TC74AC541F
IC36 SN74HC163ANS
IC37 TC74AC74F
IC38 TC74AC240F
IC39 TC74AC541F
IC51 CXD8058Q
IC52 CXD8058Q
IC53 CXD8058Q
IC54 CXD8058Q
IC55 CXD8058Q
IC56 CXD8058Q
TP1 CKD
TP2 ADR
TP3 DIO
TP4 RSTL
TP5 CKX
TP6 HD
TP7 VDS
TP8 CK
TP9 HFCK
TP10 QTCK
JW1
+5V
GND
RSTL
HFCK11
HFCK13
E1 E2 E3 E4 E5


IC51 CXD8058Q
IC52 CXD8058Q
IC53 CXD8058Q
IC54 CXD8058Q
IC55 CXD8058Q
IC56 CXD8058Q
IC57 CXD8058Q
IC58 CXD8058Q
CS22
CS23
CS20
CS21
C41A
CS1B
CS27
RP080
RP081
RP082
RP083
RP220
RP221
RP222
RP230
RP231
RP232
RP200
RP201
RP202
RP203
RP210
TMP1
BOXH
SFTH
SMPL
HFCK11
HFCK12
HFCK13
RSTL
ADRB1
WDB1
CKDB1
CKX
+5V
IC31 74AC240F
IC36 SN74HC163ANS
IC37 TC74AC74F (1/2)
JW1
D2
D1
IC32 TC74AC540F
IC33 TC74AC540F
IC34 TC74AC540F
IC35 TC74AC541F
IC8 TC74AC540F
IC38 TC74AC240F
IC39 TC74AC541F
IC37 (2/2) TC74AC74F
IC30 TC74AC540F
IC39 TC74AC541F (5/5)
TP10 QTCK
TP9 HFCK
TP8 CK
HD
DLSC
HFCK22D
HFCK23E
CK 21N
HFCK82N
CS-A 2/9
CS-B 3/9
CS-C 4/9
CS-D 5/9
CS-E 6/9
CS-F 7/9
CS-G 8/9
CS-H 9/9
BDDL-1A 5/9
BDDL-1B 5/9
BDDL-1C 5/9
BDDL-1D 5/9
C-BGA.SYDL 7/9
C-BGB.SYDL 7/9
C-FL1.SYDL 7/9
Y-BGA.SYDL 8/9
Y-BGB.SYDL 8/9
Y-FL1.SYDL 8/9
SYDL-MSK1 4/9
SYDL-KEY1 4/9
FL1.BDDL1 7/9
FL1.BDDL2 7/9
FL1.BDDL2 8/9
SYDL-TRANS 3/9
SMPL 2/9
SMPL 9/9
C-OFFSET.1 7/9
Y-OFFSET.2 9/9
C-OFFSET.2 9/9
Y-OFFSET.1 8/9
Y-FXDL 9/9
BORDER 7/9
KEY1 MAT 8/9
PATERN KEY1 5/9
THRU KEY1 4/9
LSB SEL1 5/9
BORDER 8/9
KEY1 MAT 7/9
PATERN KEY1 4/9
SOFT LIMIT 4/9
SELF 1 4/9
BKGD SEL-PGM 7/9
BKGD SEL-PVW 8/9
KEY1 OFF-PGM 7/9
KEY1 OFF-PGM 8/9
KEY1 OFF-PVW 7/9
KEY1 OFF-PVW 8/9
OUT LINE 6/9
L:DEMULT1 2/9
XP CONT 2/9
XP CONT 9/9
SERIAL 2/9
SERIAL 3/9
SERIAL 4/9
SERIAL 5/9
SERIAL 6/9
SERIAL 7/9
SERIAL 8/9
SERIAL 9/9
CK21 2/9
CK22 2/9
CK 21N 2/9
HFCK21 2/9
HFCK22ND 2/9
HFCK23NE 2/9
HFCK31 3/9
HFCK31N 3/9
QTCK31 3/9
QTCK91 2/9
HFCK41 4/9
HFCK41N 4/9
HFCK51 5/9
HFCK51N 5/9
HFCK52N 5/9
HFCK53N 5/9
HFCK61 6/9
QTCK61 6/9
HFCK71 7/9
HFCK71N 7/9
HFCK72 7/9
HFCK72N 7/9
QTCK-SC 7/9
HFCK81 8/9
HFCK81N 8/9
HFCK82 8/9
HFCK82N 8/9
CK91 9/9
CK92 9/9
HFCK91 9/9
HFCK92 9/9
HFCK93D 9/9
QTCK91 2/9
VIDEO TIMING 2/9
VIDEO TIMING 3/9
VIDEO TIMING 4/9
*....-8000 (21)
**...-8000C (11)

MIX-6/MIX-6 (A) (1/9)
1-636-512-12
DVS-8000/DVS-8000C

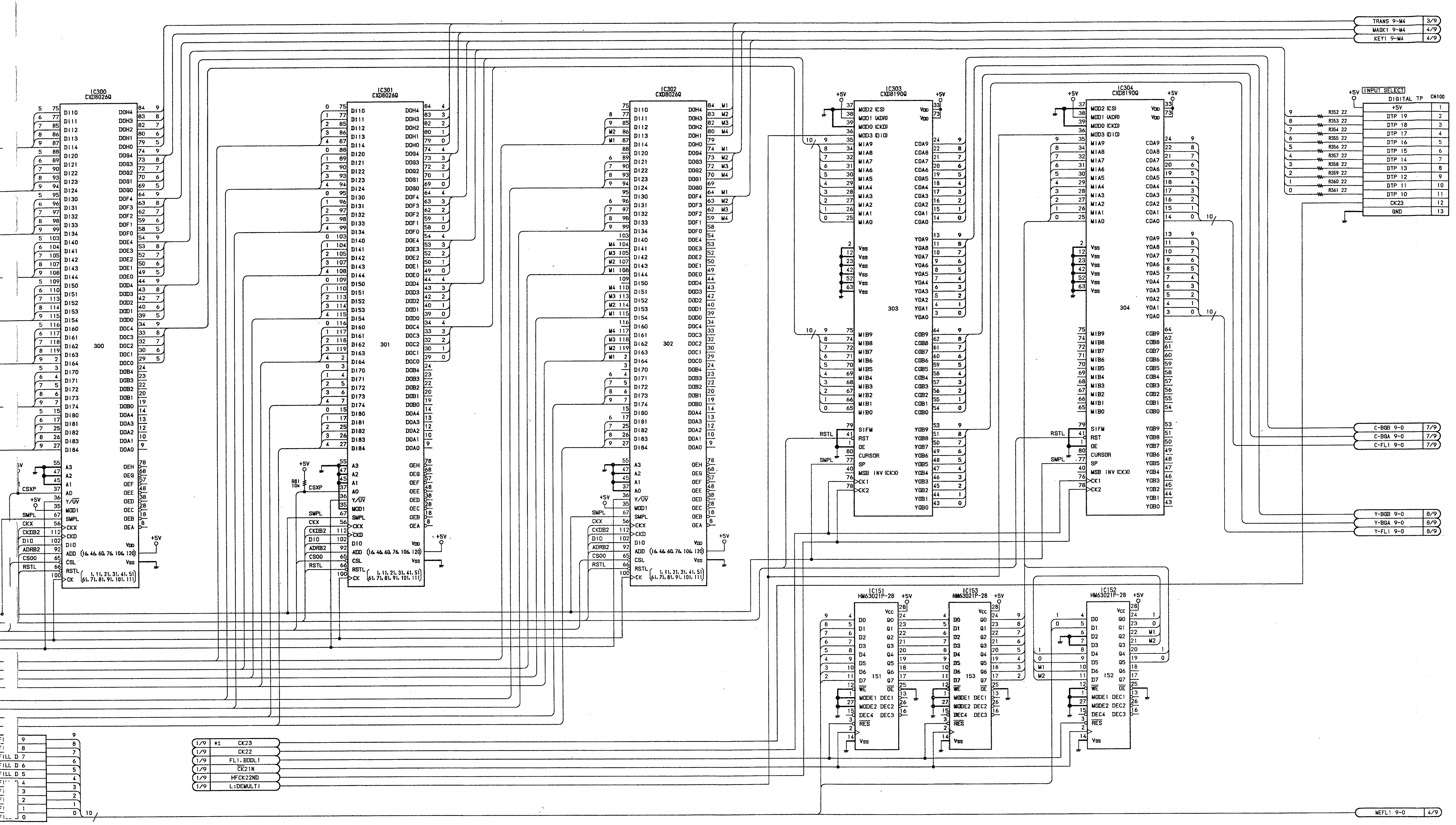
| E | F | G | H | I | J | K | L |

MIX-6 (2/9) DSK (DOWNSTREAM KEYER) BOARD


IC100
CXD8053Q
IC300
CXD8026Q
IC301
CXD8026Q
IC302
CXD8026Q
IC303
CXD8190Q
IC151
HM63021FP-28
1/9 VIDEO TIMING
1/9 CS-A
1/9 SMPL
1/9 SERIAL
1/9 HFCK21
1/9 HFCK23NE
1/9 XP CONT
1/9 CK21
CNY1
CNX1
WSLD3
WSLD2
WSLD1
BKGDB
MASK D
BKGDA
KYSR D
FILL D
1/9 ＊1 CK23
1/9 CK22
1/9 FL1.BODL1
1/9 CK21N
1/9 HFCK22ND
1/9 L:DEMULT1
+5V
RSTL
CKX
CS06
D10
ADRB2
CKDB2
SMPL
CSXP

Note: ＊1-----(-12) board is "GTCK91".

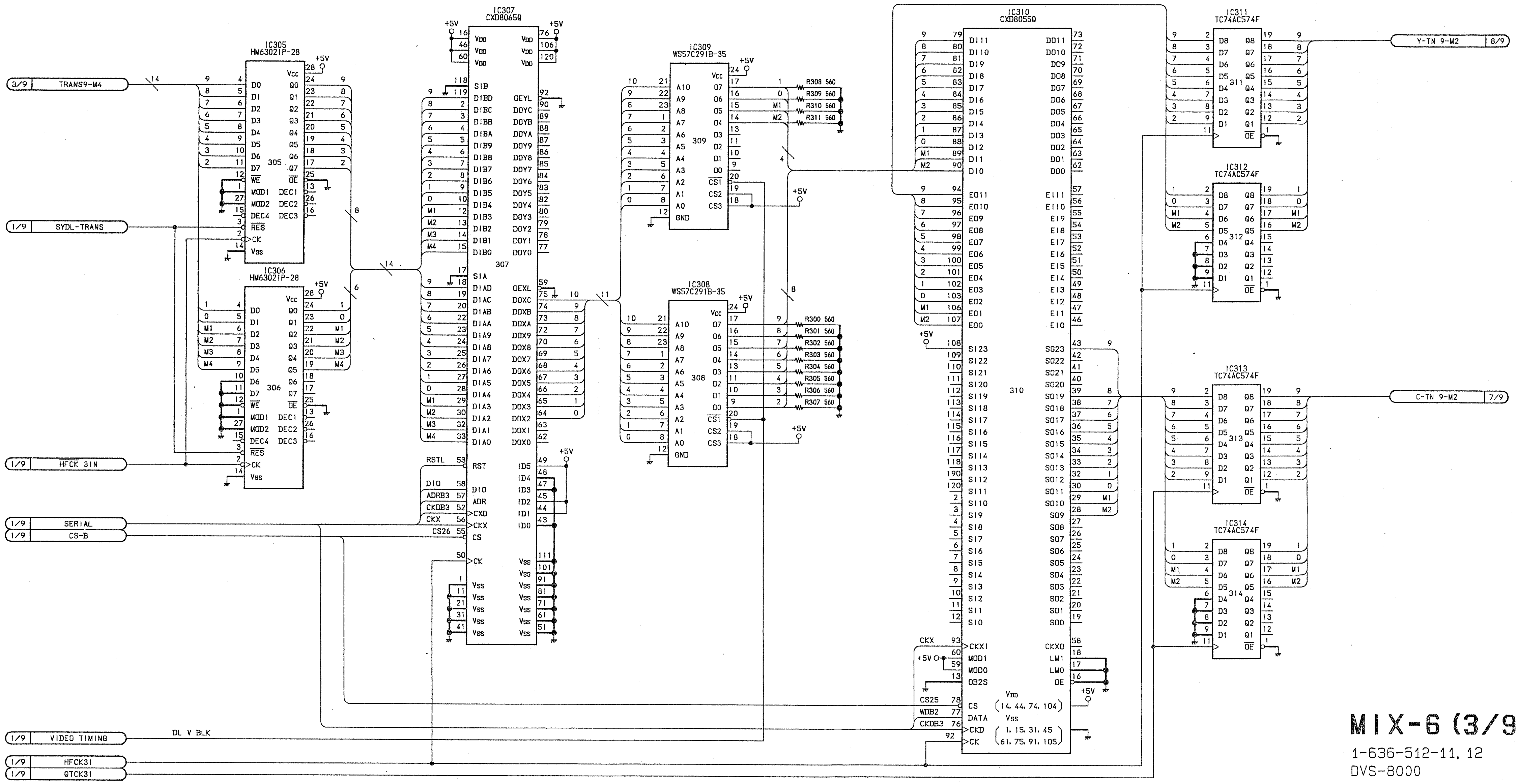
A | B | C | D | E | F | G | H


IC300 CXD8026Q
IC301 CXD8026Q
IC302 CXD8026Q
IC303 CXD8190Q
IC304 CXD8190Q
IC151 HM63021P-28
IC153 HM63021P-28
IC152 HM63021P-28
TRANS 9-M4 3/9
MASK1 9-M4 4/9
KEY1 9-M4 4/9
+5V
INPUT SELECT
DIGITAL TP
CN100
R352 22
R353 22
R354 22
R355 22
R356 22
R357 22
R358 22
R359 22
R360 22
R361 22
+5V 1
DTP 19 2
DTP 18 3
DTP 17 4
DTP 16 5
DTP 15 6
DTP 14 7
DTP 13 8
DTP 12 9
DTP 11 10
DTP 10 11
CK23 12
GND 13
C-BGB 9-0 7/9
C-BGA 9-0 7/9
C-FL1 9-0 7/9
Y-BGB 9-0 8/9
Y-BGA 9-0 8/9
Y-FL1 9-0 8/9
MEFL1 9-0 4/9
1/9 ※1 CK23
1/9 CK22
1/9 FL1.BODL1
1/9 CK21N
1/9 HFCK22ND
1/9 L:DEMULTI
CSXP
SMPL
CKX
CKDB2
DIO
ADRB2
CS00
RSTL
R61 10k

MIX-6 (2/9)
1-636-512-11, 12
DVS-8000

Note: ※1-----(-12)board is "GTCK91".

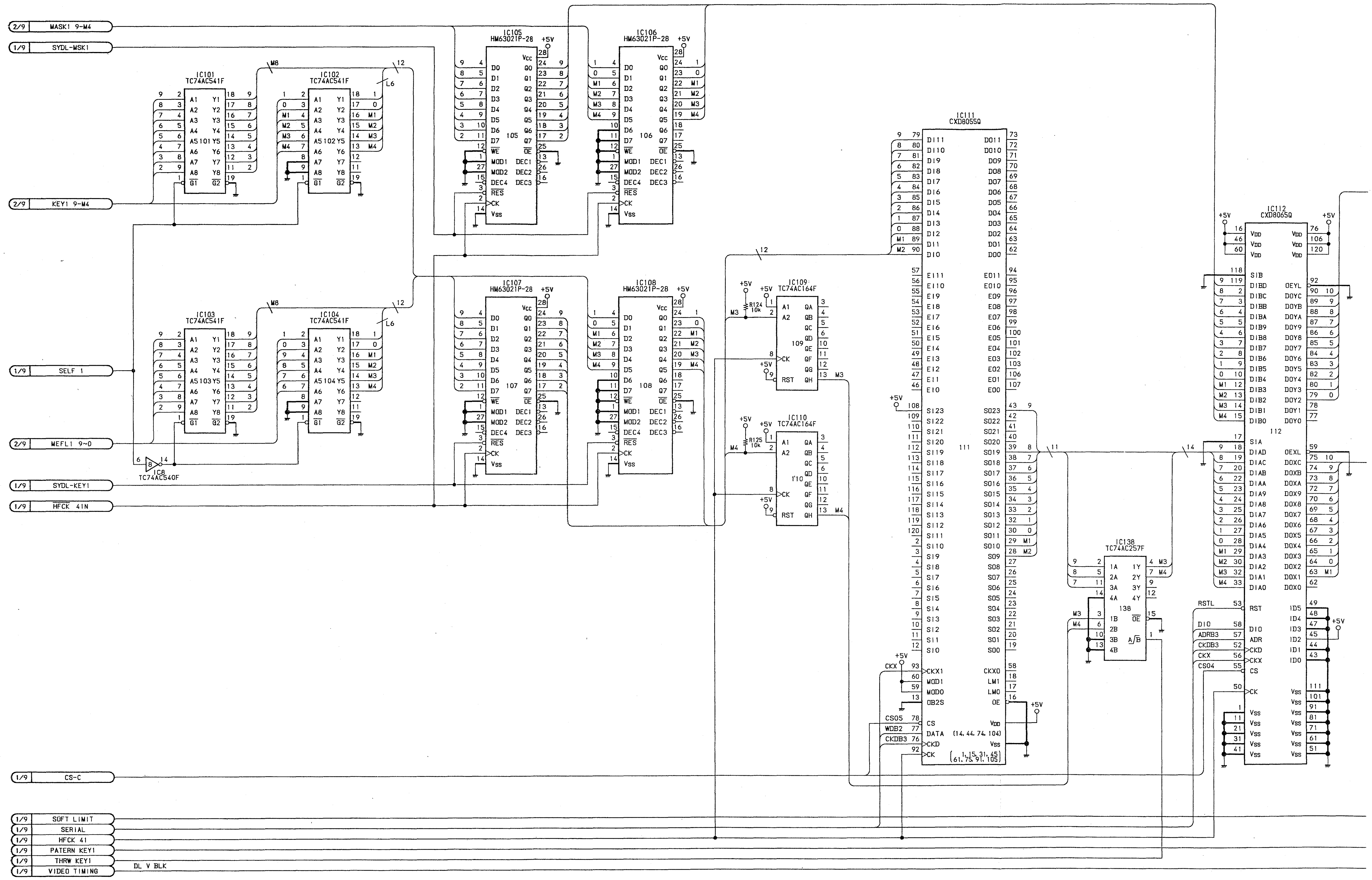
MIX-6 (3/9) DSK (DOWNSTREAM KEYER) BOARD



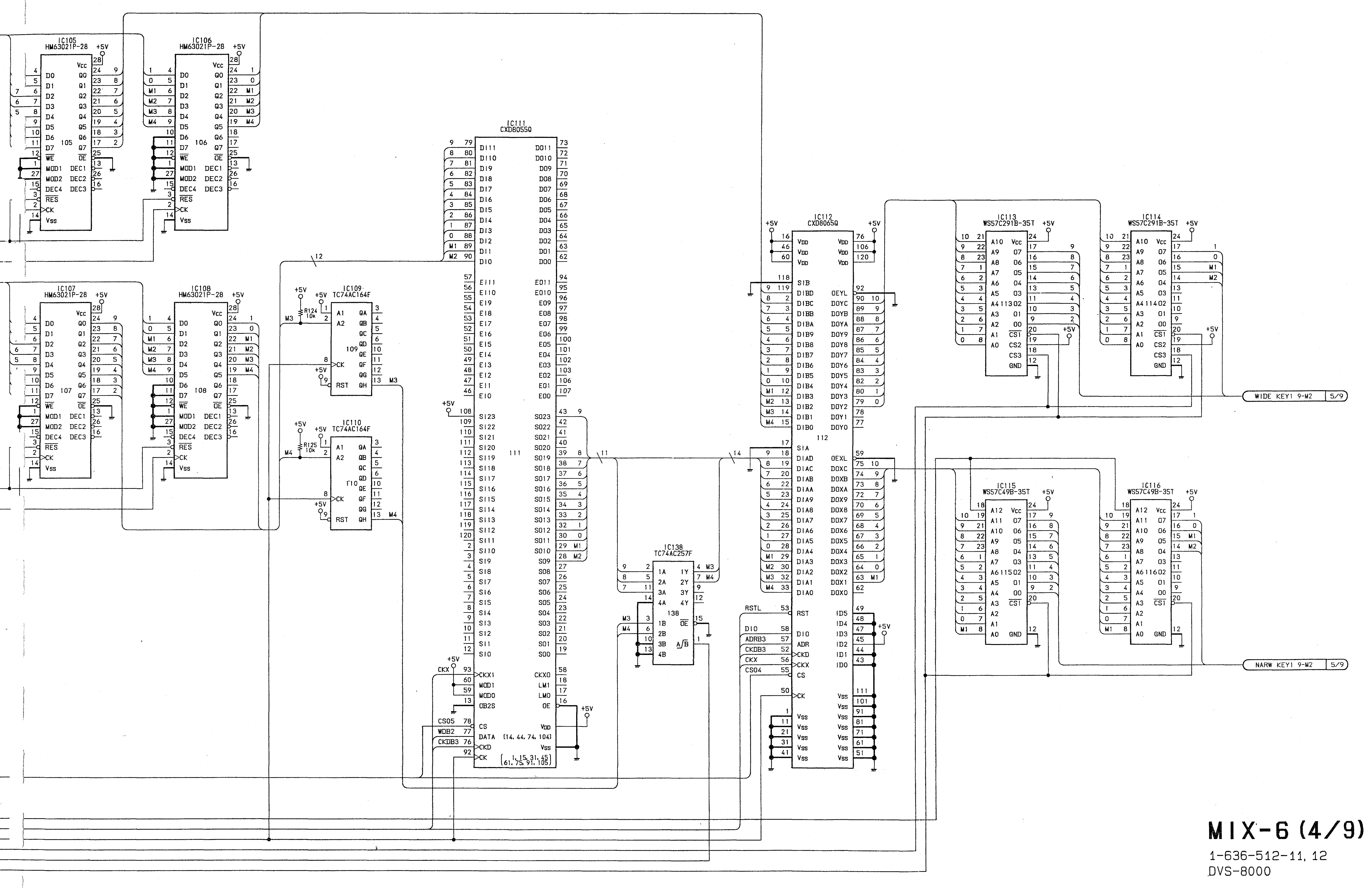
3/9 TRANS9-M4
1/9 SYDL-TRANS
1/9 HFCK 31N
1/9 SERIAL
1/9 CS-B
1/9 VIDEO TIMING
DL V BLK
1/9 HFCK31
1/9 QTCK31
IC305 HM63021P-28
IC306 HM63021P-28
IC307 CXD8065Q
IC308 WS57C291B-35
IC309 WS57C291B-35
IC310 CXD8055Q
IC311 TC74AC574F
IC312 TC74AC574F
IC313 TC74AC574F
IC314 TC74AC574F
+5V
R300 560
R301 560
R302 560
R303 560
R304 560
R305 560
R306 560
R307 560
R308 560
R309 560
R310 560
R311 560
RSTL
DIO
ADRB3
CKDB3
CKX
CS26
CS25
WDB2
CKX
Y-TN 9-M2 8/9
C-TN 9-M2 7/9

MIX-6 (3/9)
1-636-512-11, 12
DVS-8000

MIX-6 (4/9) DSK (DOWNSTREAM KEYER) BOARD


1
2
3
4
5
2/9 MASK1 9-M4
1/9 SYDL-MSK1
2/9 KEY1 9-M4
1/9 SELF 1
2/9 MEFL1 9~0
1/9 SYDL-KEY1
1/9 HFCK 41N
1/9 CS-C
1/9 SOFT LIMIT
1/9 SERIAL
1/9 HFCK 41
1/9 PATERN KEY1
1/9 THRW KEY1
1/9 VIDEO TIMING
DL V BLK
IC101 TC74AC541F
IC102 TC74AC541F
IC103 TC74AC541F
IC104 TC74AC541F
IC8 TC74AC540F
IC105 HM63021P-28
IC106 HM63021P-28
IC107 HM63021P-28
IC108 HM63021P-28
IC109 TC74AC164F
IC110 TC74AC164F
R124 10k
R125 10k
IC111 CXD8055Q
IC112 CXD8065Q
IC138 TC74AC257F
+5V
M8
12
L6
M3
M4
CKX
CS05
WDB2
CKDB3
RSTL
DIO
ADRB3
CKDB3
CKX
CS04
(14, 44, 74, 104)
(1, 15, 31, 45, 61, 75, 91, 105)

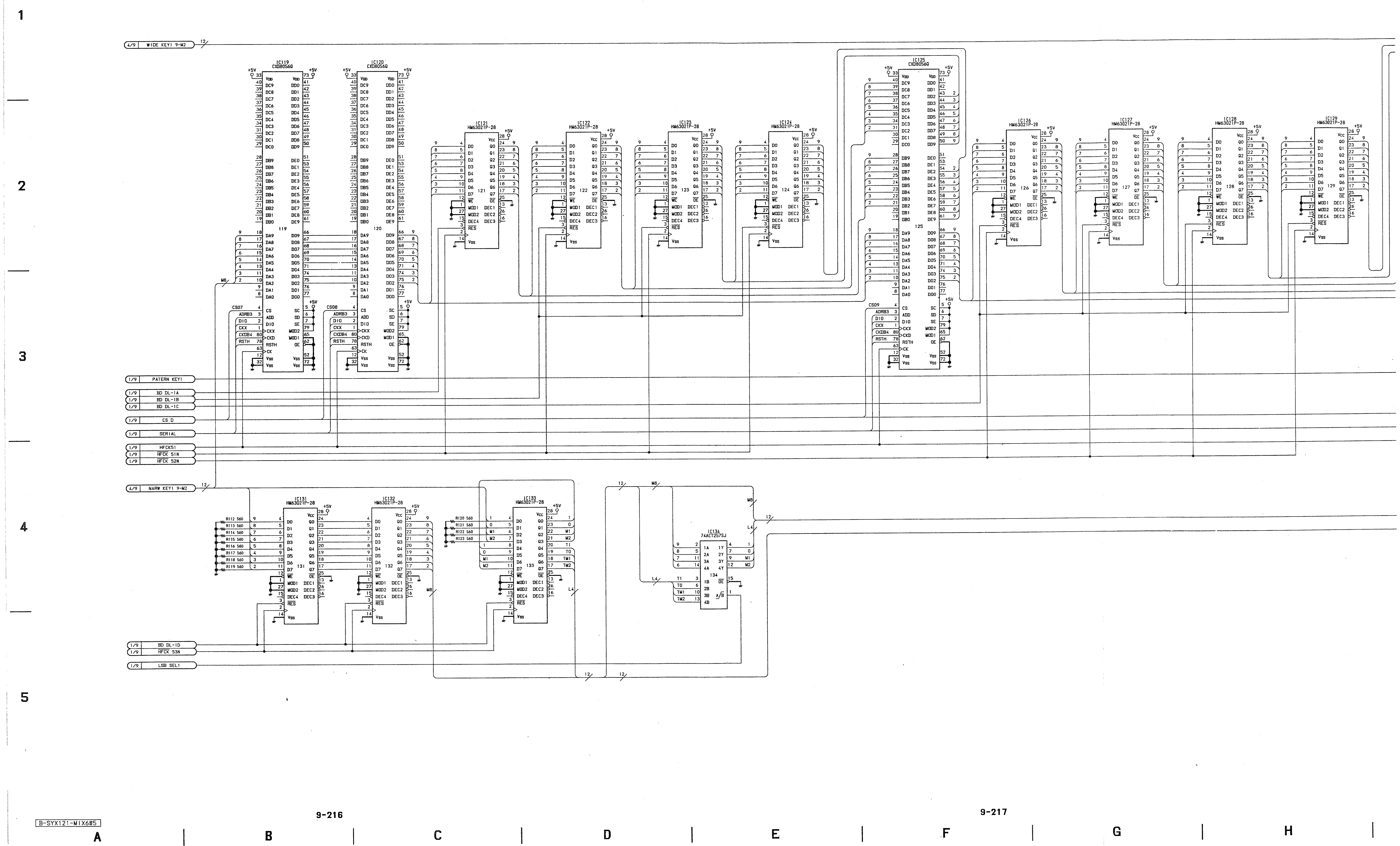
A | B | C | D | E | F | G | H

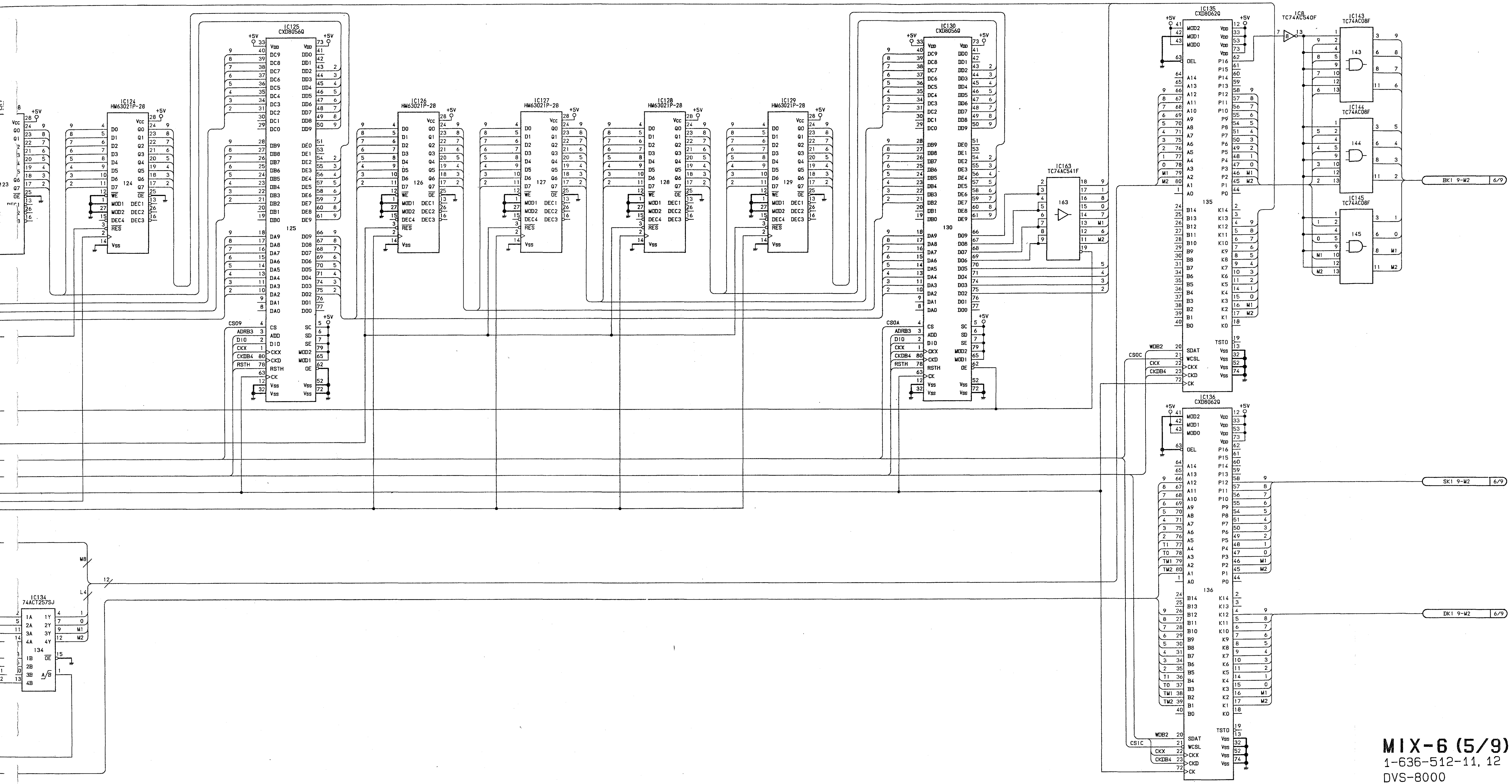

IC105 HM63021P-28
IC106 HM63021P-28
IC107 HM63021P-28
IC108 HM63021P-28
IC109 TC74AC164F
IC110 TC74AC164F
IC111 CXD8055Q
IC112 CXD8065Q
IC113 WS57C291B-35T
IC114 WS57C291B-35T
IC115 WS57C49B-35T
IC116 WS57C49B-35T
IC138 TC74AC257F
R124 10k
R125 10k
+5V
M3
M4
CKX
CS05
WDB2
CKDB3
RSTL
DIO
ADRB3
CKDB3
CKX
CS04
WIDE KEY1 9-M2
5/9
NARW KEY1 9-M2
5/9

MIX-6 (4/9)

1-636-512-11, 12
DVS-8000

MIX-6 (5/9) DSK (DOWNSTREAM KEYER) BOARD

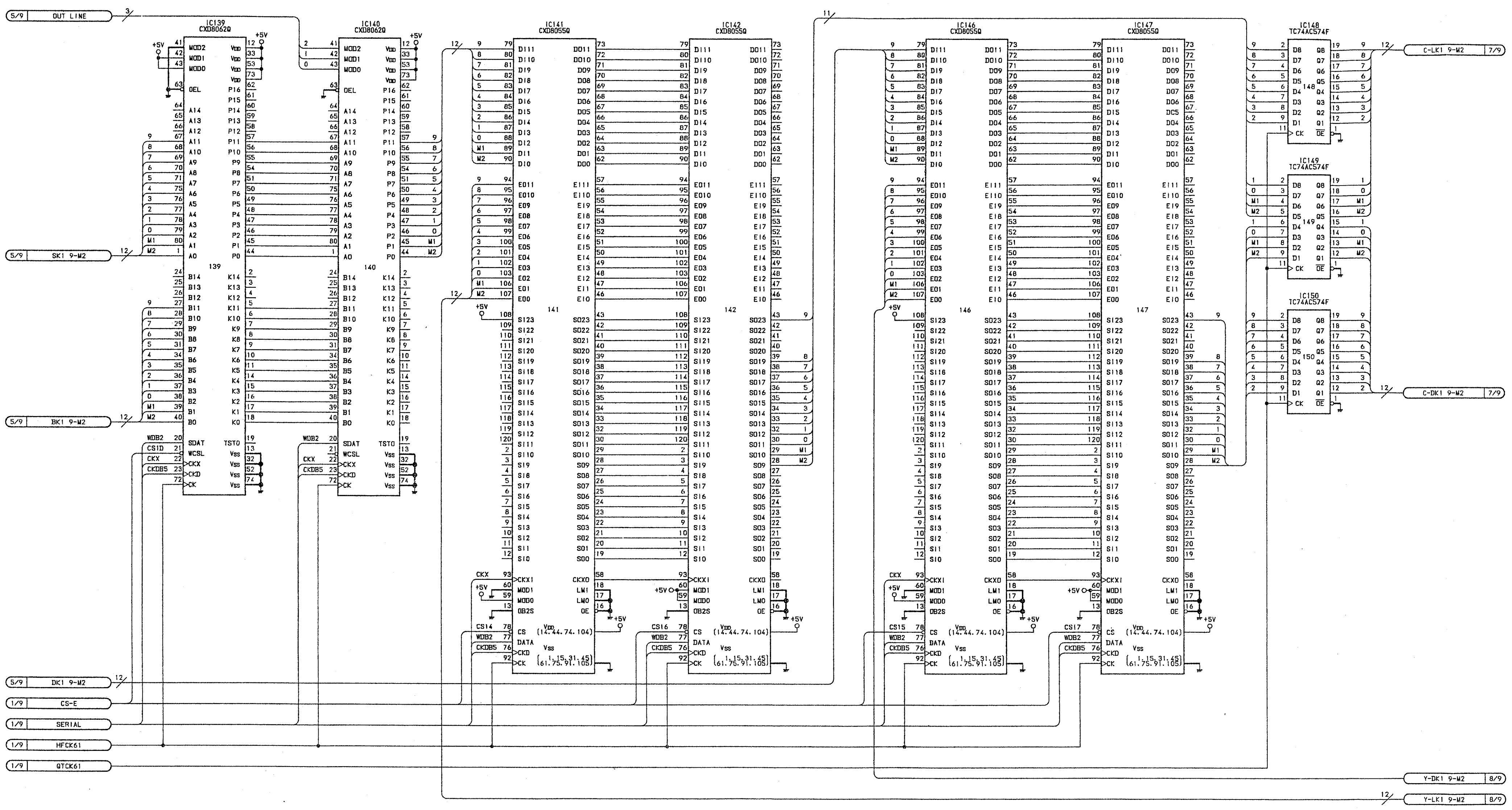

1
2
3
4
5
4/9 WIDE KEY1 9-M2
IC119 CXD8056Q
IC120 CXD8056Q
IC121 HM63021P-28
IC122 HM63021P-28
IC123 HM63021P-28
IC124 HM63021P-28
IC125 CXD8056Q
IC126 HM63021P-28
IC127 HM63021P-28
IC128 HM63021P-28
IC129 HM63021P-28
CS07
CS08
CS09
M8
1/9 PATERN KEY1
1/9 BD DL-1A
1/9 BD DL-1B
1/9 BD DL-1C
1/9 CS D
1/9 SERIAL
1/9 HFCK51
1/9 HFCK 51N
1/9 HFCK 52N
4/9 NARW KEY1 9-M2
IC131 HM63021P-28
IC132 HM63021P-28
IC133 HM63021P-28
IC134 74AC1257SJ
R112 560
R113 560
R114 560
R115 560
R116 560
R117 560
R118 560
R119 560
R120 560
R121 560
R122 560
R123 560
1/9 BD DL-1D
1/9 HFCK 53N
1/9 LSB SEL1
A
B
C
D
E
F
G
H


IC124
HM63021P-28
IC125
CXD8056Q
IC126
HM63021P-28
IC127
HM63021P-28
IC128
HM63021P-28
IC129
HM63021P-28
IC130
CXD8056Q
IC163
TC74AC541F
IC135
CXD8062Q
IC136
CXD8062Q
IC8
TC74AC540F
IC143
TC74AC08F
IC144
TC74AC08F
IC145
TC74AC08F
IC134
74ACT257SJ
+5V
CS09
CS0A
CS0C
CS1C
ADRB3
DIO
CKX
CKDB4
RSTH
MDB2
M8
L4
M1
M2
BK1 9-M2
6/9
SK1 9-M2
6/9
DK1 9-M2
6/9

MIX-6 (5/9)
1-636-512-11, 12
DVS-8000

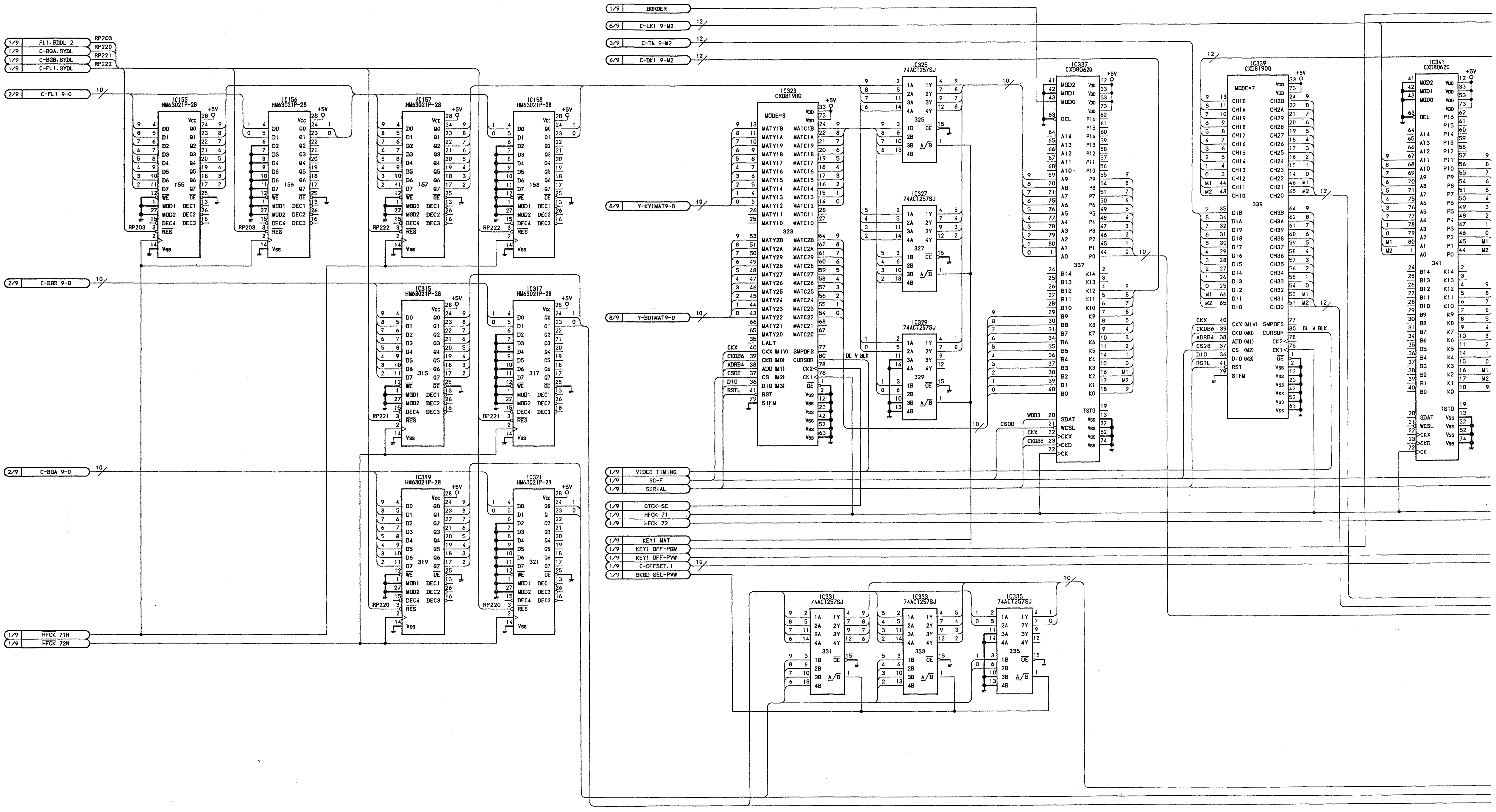
E | F | G | H | I | J | K | L

MIX-6 (6/9) DSK (DOWNSTREAM KEYER) BOARD

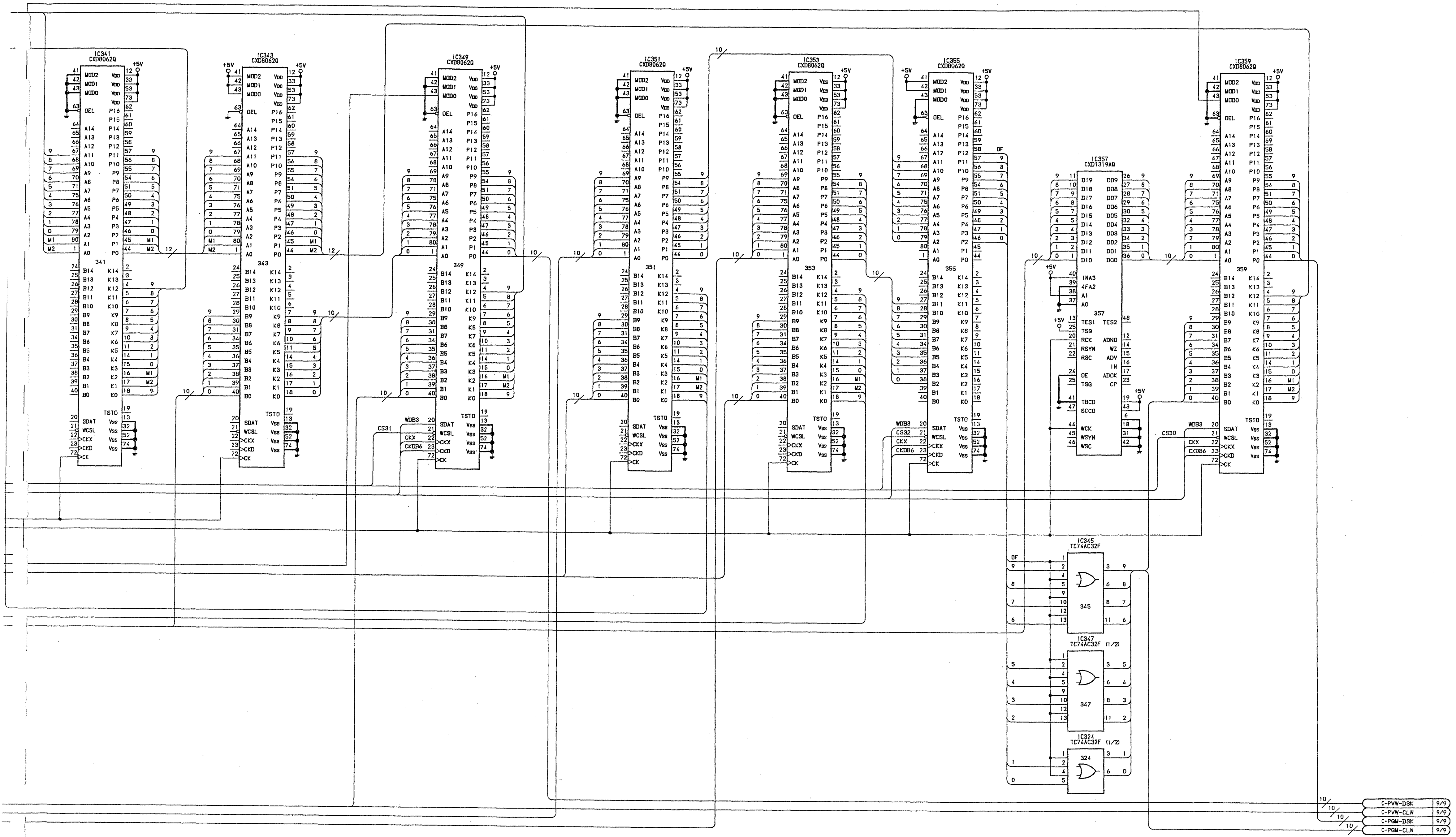

5/9 OUT LINE
5/9 SK1 9-M2
5/9 BK1 9-M2
5/9 DK1 9-M2
1/9 CS-E
1/9 SERIAL
1/9 HFCK61
1/9 QTCK61
IC139 CXD8062Q
IC140 CXD8062Q
IC141 CXD8055Q
IC142 CXD8055Q
IC146 CXD8055Q
IC147 CXD8055Q
IC148 TC74AC574F
IC149 TC74AC574F
IC150 TC74AC574F
+5V
C-LK1 9-M2 7/9
C-DK1 9-M2 7/9
Y-DK1 9-M2 8/9
Y-LK1 9-M2 8/9

MIX-6 (6/9)
1-636-512-11, 12
DVS-8000

MIX-6 (7/9) DSK (DOWNSTREAM KEYER) BOARD

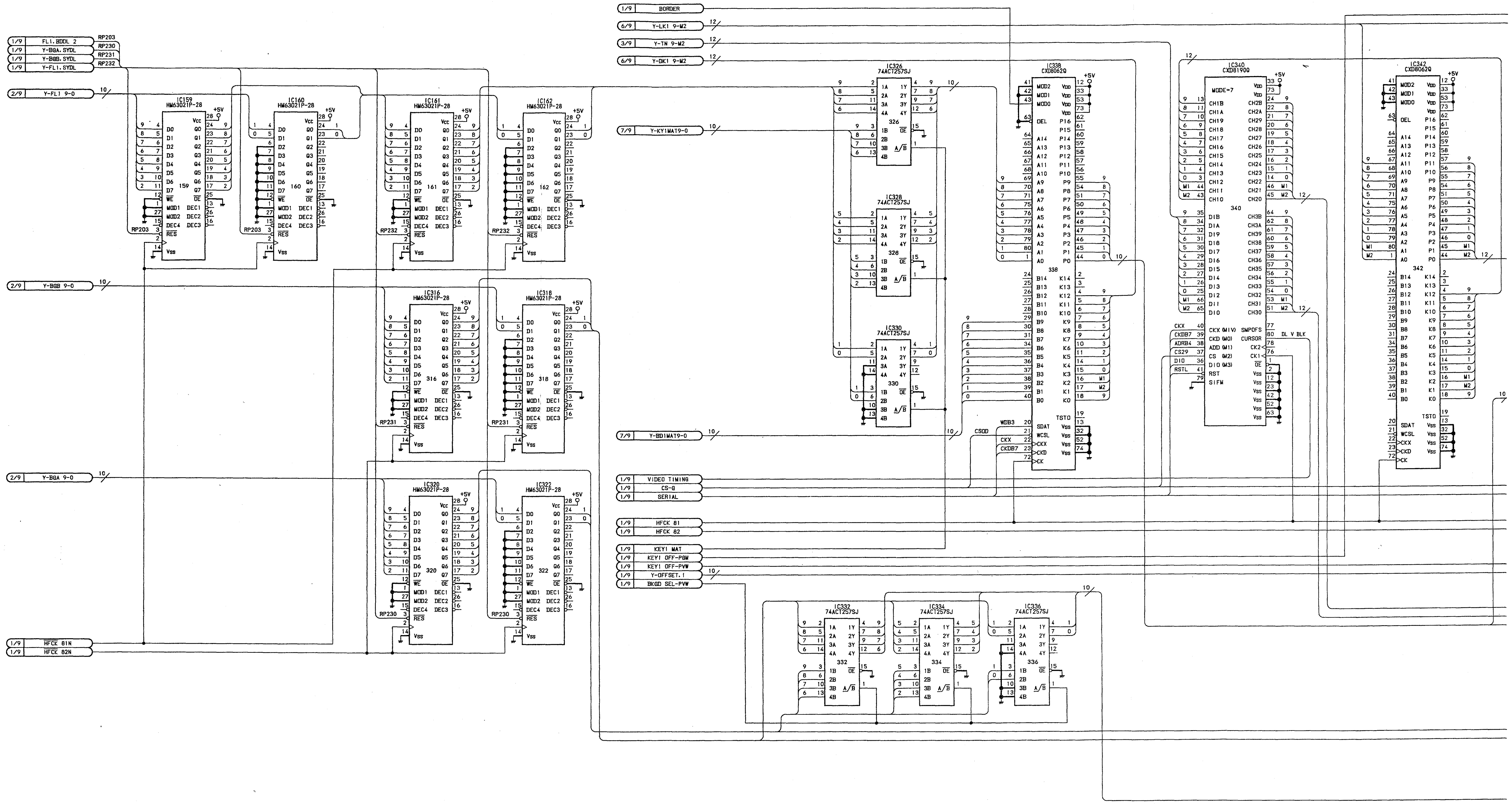

1/9 FL1.BDDL 2
1/9 C-BGA.SYDL
1/9 C-BGB.SYDL
1/9 C-FL1.SYDL
RP203
RP220
RP221
RP222
2/9 C-FL1 9-0
2/9 C-BGB 9-0
2/9 C-BGA 9-0
1/9 HFCK 71N
1/9 HFCK 72N
IC155 HM63021P-28
IC156 HM63021P-28
IC157 HM63021P-28
IC158 HM63021P-28
IC315 HM63021P-28
IC317 HM63021P-28
IC319 HM63021P-28
IC321 HM63021P-28
1/9 BORDER
6/9 C-LK1 9-M2
3/9 C-TN 9-M2
6/9 C-DK1 9-M2
8/9 Y-KYIMAT9-0
8/9 Y-BDIMAT9-0
IC323 CXD8190Q
IC325 74ACT257SJ
IC327 74ACT257SJ
IC329 74ACT257SJ
IC337 CXD8062Q
IC339 CXD8190Q
IC341 CXD8062Q
IC331 74ACT257SJ
IC333 74ACT257SJ
IC335 74ACT257SJ
1/9 VIDEO TIMING
1/9 SC-F
1/9 SERIAL
1/9 QTCK-SC
1/9 HFCK 71
1/9 HFCK 72
1/9 KEY1 MAT
1/9 KEY1 OFF-PGM
1/9 KEY1 OFF-PVW
1/9 C-OFFSET.1
1/9 BKGD SEL-PVW
MODE=8
MODE=7
DL V BLK
+5V

A | B | C | D | E | F | G | H |


IC341
CXD8062Q
IC343
CXD8062Q
IC349
CXD8062Q
IC351
CXD8062Q
IC353
CXD8062Q
IC355
CXD8062Q
IC357
CXD1319AQ
IC359
CXD8062Q
IC345
TC74AC32F
IC347
TC74AC32F (1/2)
IC324
TC74AC32F (1/2)
+5V
CS31
CS30
CS32
WDB3
CKX
CKDB6
C-PVW-DSK 9/9
C-PVW-CLN 9/9
C-PGM-DSK 9/9
C-PGM-CLN 9/9

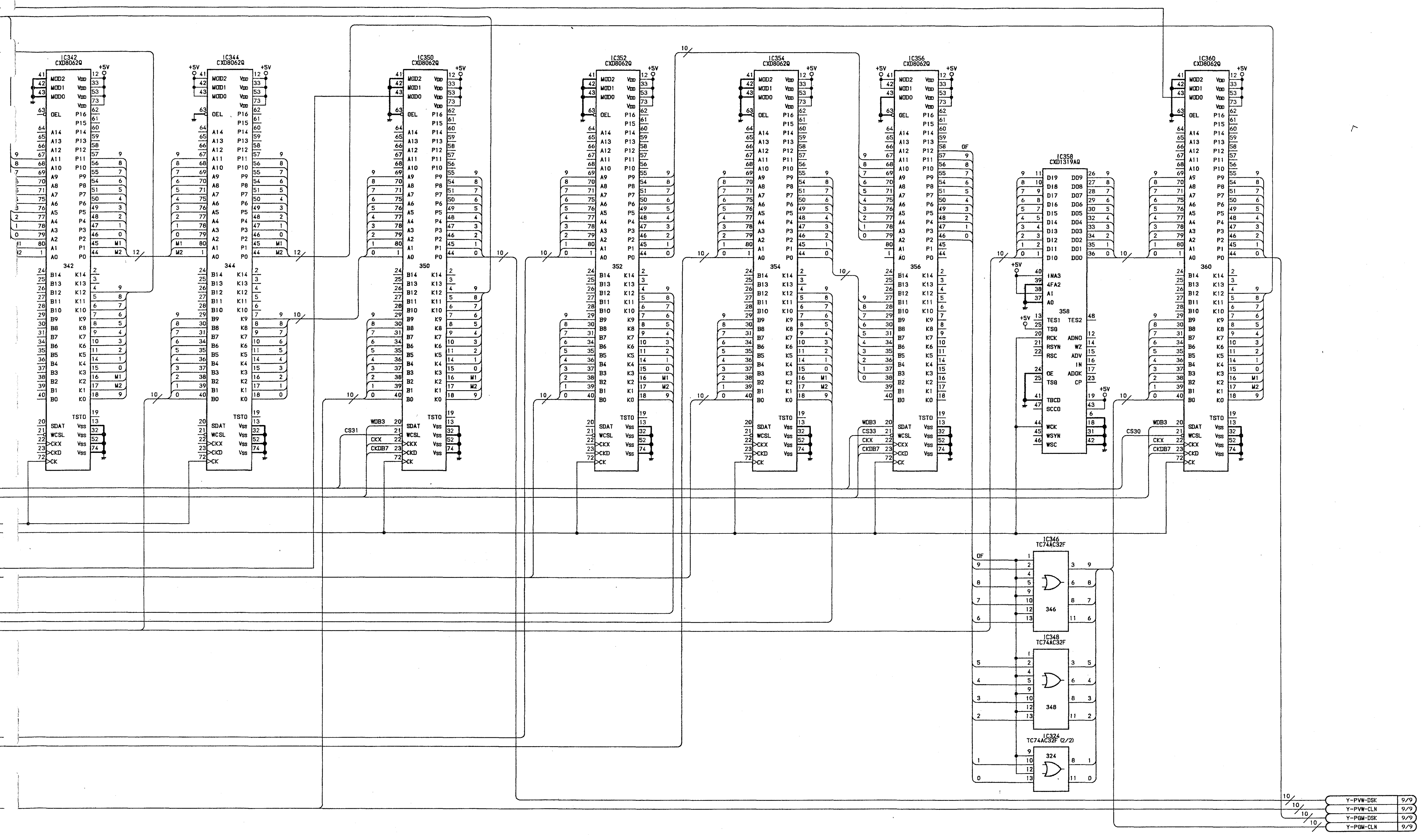
MIX-6 (7/9)
1-636-512-11, 12
DVS-8000

MIX-6 (8/9) DSK (DOWNSTREAM KEYER) BOARD


1/9 FL1.BDDL 2
1/9 Y-BGA.SYDL
1/9 Y-BGB.SYDL
1/9 Y-FL1.SYDL
RP203
RP230
RP231
RP232
2/9 Y-FL1 9-0
2/9 Y-BGB 9-0
2/9 Y-BGA 9-0
1/9 HFCK 81N
1/9 HFCK 82N
IC159 HM63021P-28
IC160 HM63021P-28
IC161 HM63021P-28
IC162 HM63021P-28
IC316 HM63021P-28
IC318 HM63021P-28
IC320 HM63021P-28
IC322 HM63021P-28
+5V
1/9 BORDER
6/9 Y-LK1 9-M2
3/9 Y-TN 9-M2
6/9 Y-DK1 9-M2
7/9 Y-KY1MAT9-0
7/9 Y-BD1MAT9-0
1/9 VIDEO TIMING
1/9 CS-8
1/9 SERIAL
1/9 HFCK 81
1/9 HFCK 82
1/9 KEY1 MAT
1/9 KEY1 OFF-PGM
1/9 KEY1 OFF-PVW
1/9 Y-OFFSET.1
1/9 BKGD SEL-PVW
IC326 74ACT257SJ
IC328 74ACT257SJ
IC330 74ACT257SJ
IC332 74ACT257SJ
IC334 74ACT257SJ
IC336 74ACT257SJ
IC338 CXD8062Q
IC340 CXD8190Q
IC342 CXD8062Q
CSQD
CKX
CKDB7
MDB3
DL V BLK

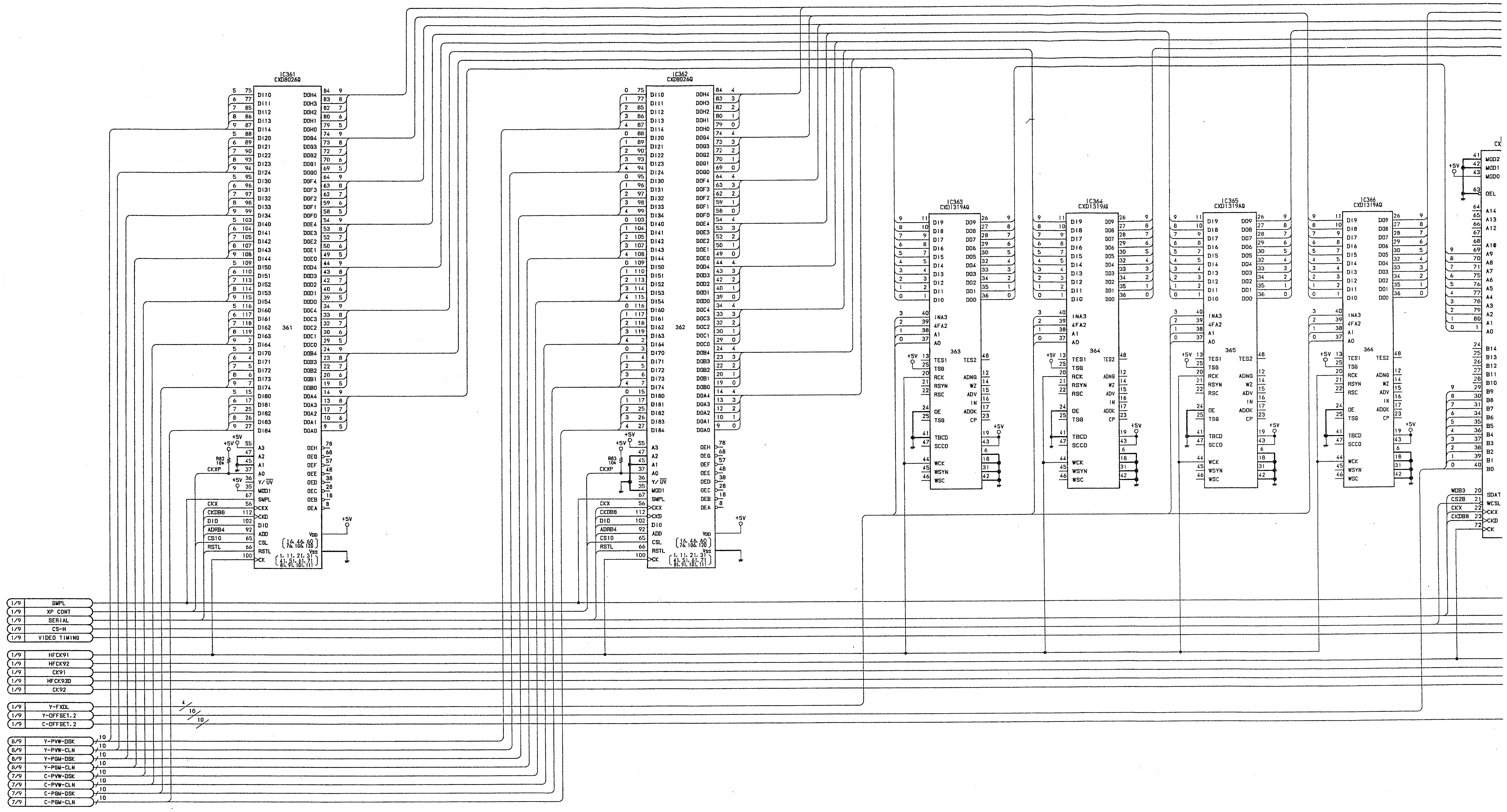
A | B | C | D | E | F | G | H

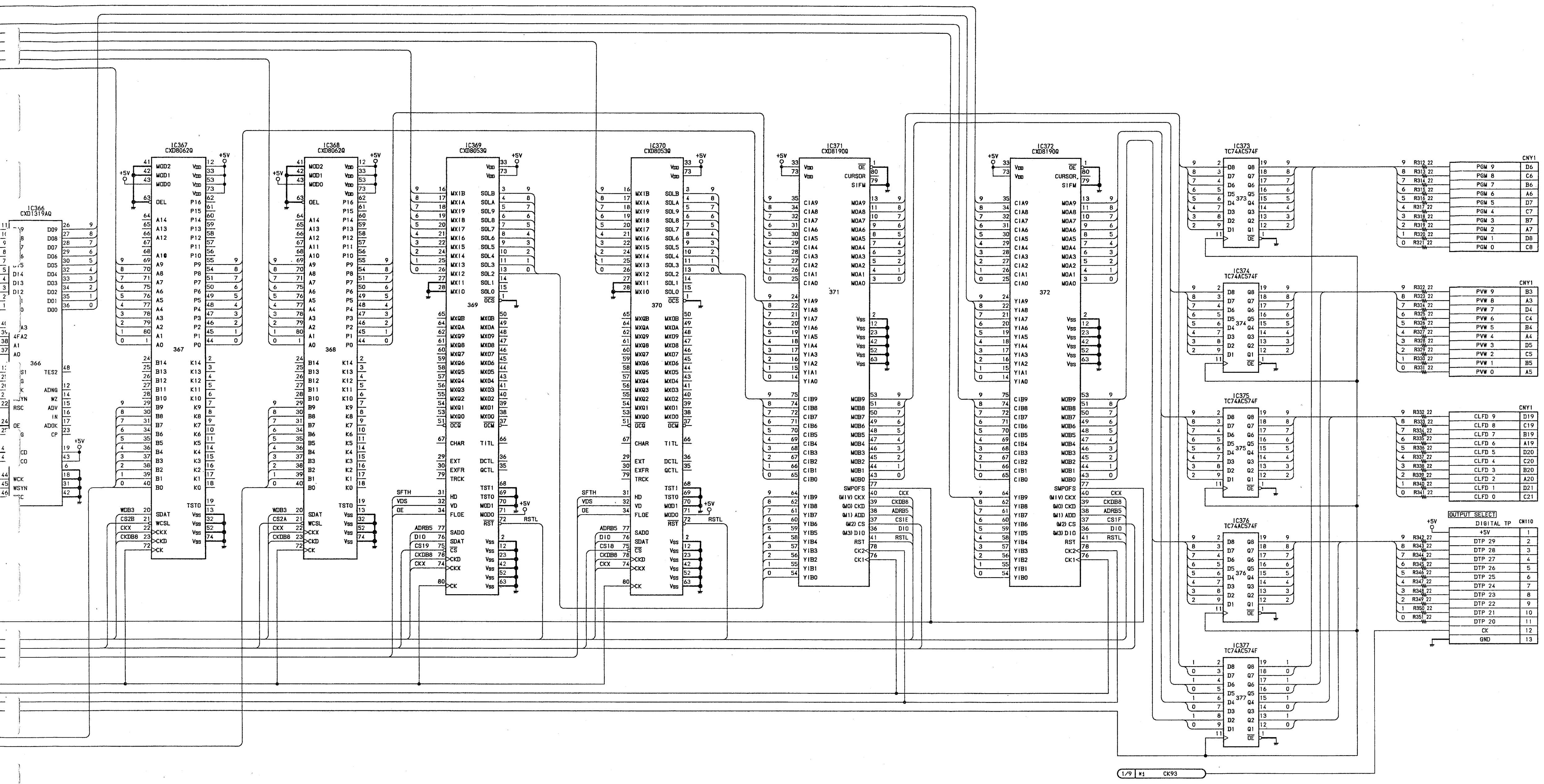
3


IC342
CXD8062Q
IC344
CXD8062Q
IC350
CXD8062Q
IC352
CXD8062Q
IC354
CXD8062Q
IC356
CXD8062Q
IC358
CXD1319AQ
IC360
CXD8062Q
IC346
TC74AC32F
IC348
TC74AC32F
IC324
TC74AC32F (2/2)
+5V
CS31
CS33
CS30
WDB3
CKX
CKDB7
OF
Y-PVW-DSK
Y-PVW-CLN
Y-PGM-DSK
Y-PGM-CLN
9/9

MIX-6 (8/9)
1-636-512-11, 12
DVS-8000

MIX-6 (9/9) DSK (DOWNSTREAM KEYER) BOARD


IC361
CXD8026Q
361
IC362
CXD8026Q
362
IC363
CXD1319AQ
363
IC364
CXD1319AQ
364
IC365
CXD1319AQ
365
IC366
CXD1319AQ
366
R82
10k
R83
10k
CKXP
+5V
CKX
CKDB6
CKDB8
D10
ADRB4
CS10
RSTL
1/9 SMPL
1/9 XP CONT
1/9 SERIAL
1/9 CS-H
1/9 VIDEO TIMING
1/9 HFCK91
1/9 HFCK92
1/9 CK91
1/9 HFCK93D
1/9 CK92
1/9 Y-FXDL
1/9 Y-OFFSET.2
1/9 C-OFFSET.2
8/9 Y-PVW-DSK
8/9 Y-PVW-CLN
8/9 Y-PGM-DSK
8/9 Y-PGM-CLN
7/9 C-PVW-DSK
7/9 C-PVW-CLN
7/9 C-PGM-DSK
7/9 C-PGM-CLN
WDB3
CS2B
CKX
CKDB8
SDAT
WCSL
CKX
CKD
CK

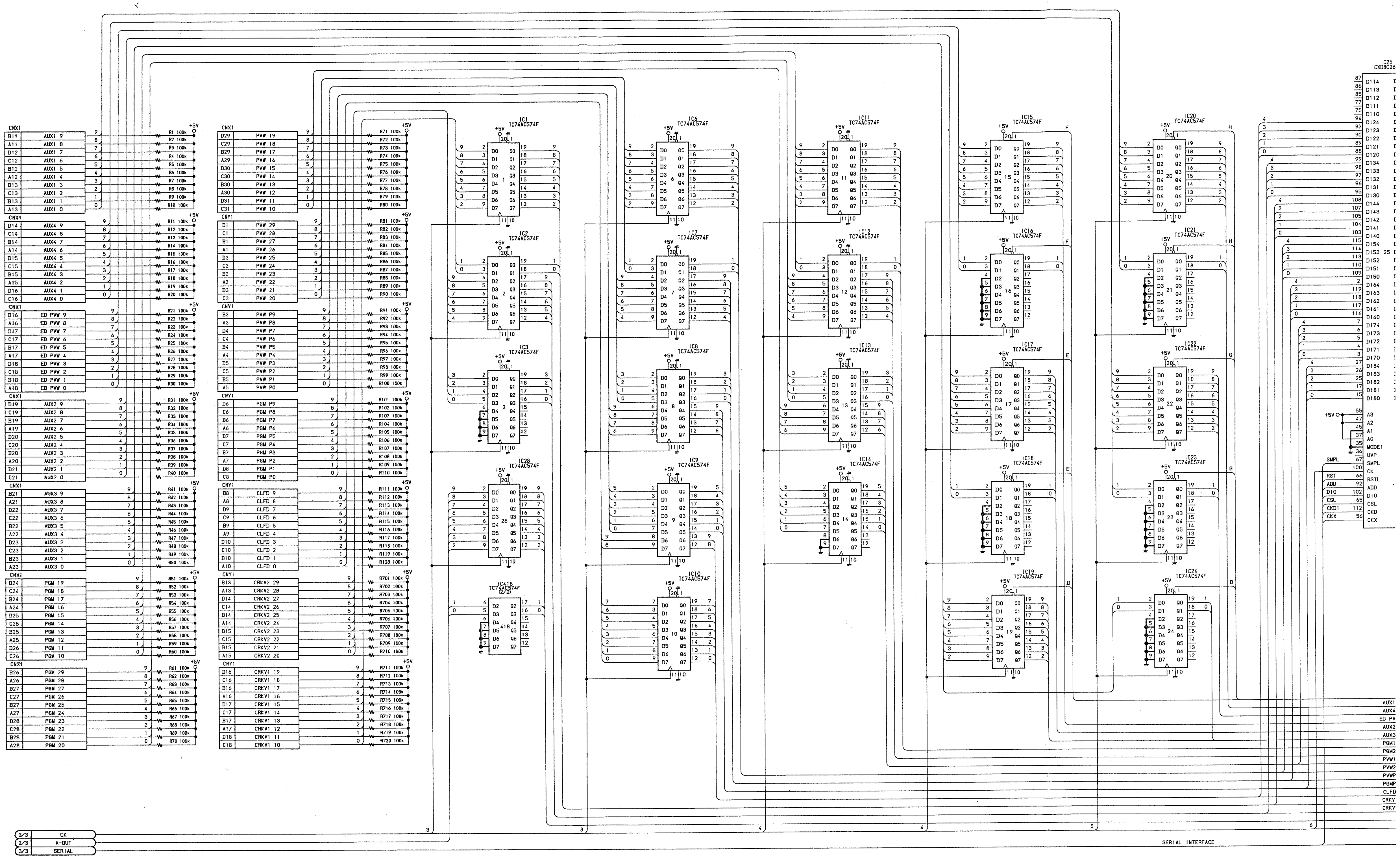

IC366 CXD1319AQ
IC367 CXD8062Q
IC368 CXD8062Q
IC369 CXD8053Q
IC370 CXD8053Q
IC371 CXD8190Q
IC372 CXD8190Q
IC373 TC74AC574F
IC374 TC74AC574F
IC375 TC74AC574F
IC376 TC74AC574F
IC377 TC74AC574F
+5V
SFTH
VDS
OE
ADRB5
D10
CS19
CKDB8
CKX
RSTL
CNY1
PGM 9 D6
PGM 8 C6
PGM 7 B6
PGM 6 A6
PGM 5 D7
PGM 4 C7
PGM 3 B7
PGM 2 A7
PGM 1 D8
PGM 0 C8
PVW 9 B3
PVW 8 A3
PVW 7 D4
PVW 6 C4
PVW 5 B4
PVW 4 A4
PVW 3 D5
PVW 2 C5
PVW 1 B5
PVW 0 A5
CLFD 9 D19
CLFD 8 C19
CLFD 7 B19
CLFD 6 A19
CLFD 5 D20
CLFD 4 C20
CLFD 3 B20
CLFD 2 A20
CLFD 1 D21
CLFD 0 C21
OUTPUT SELECT
DIGITAL TP
CN110
+5V 1
DTP 29 2
DTP 28 3
DTP 27 4
DTP 26 5
DTP 25 6
DTP 24 7
DTP 23 8
DTP 22 9
DTP 21 10
DTP 20 11
CK 12
GND 13
1/9 *1 CK93

MIX-6 (9/9)
1-636-512-11, 12
DVS-8000

Note: *1-----(-12)board is "QTCK91".

OUT-1 (1/3) OUTPUT PROCESSOR BOARD

1 2 3 4 5

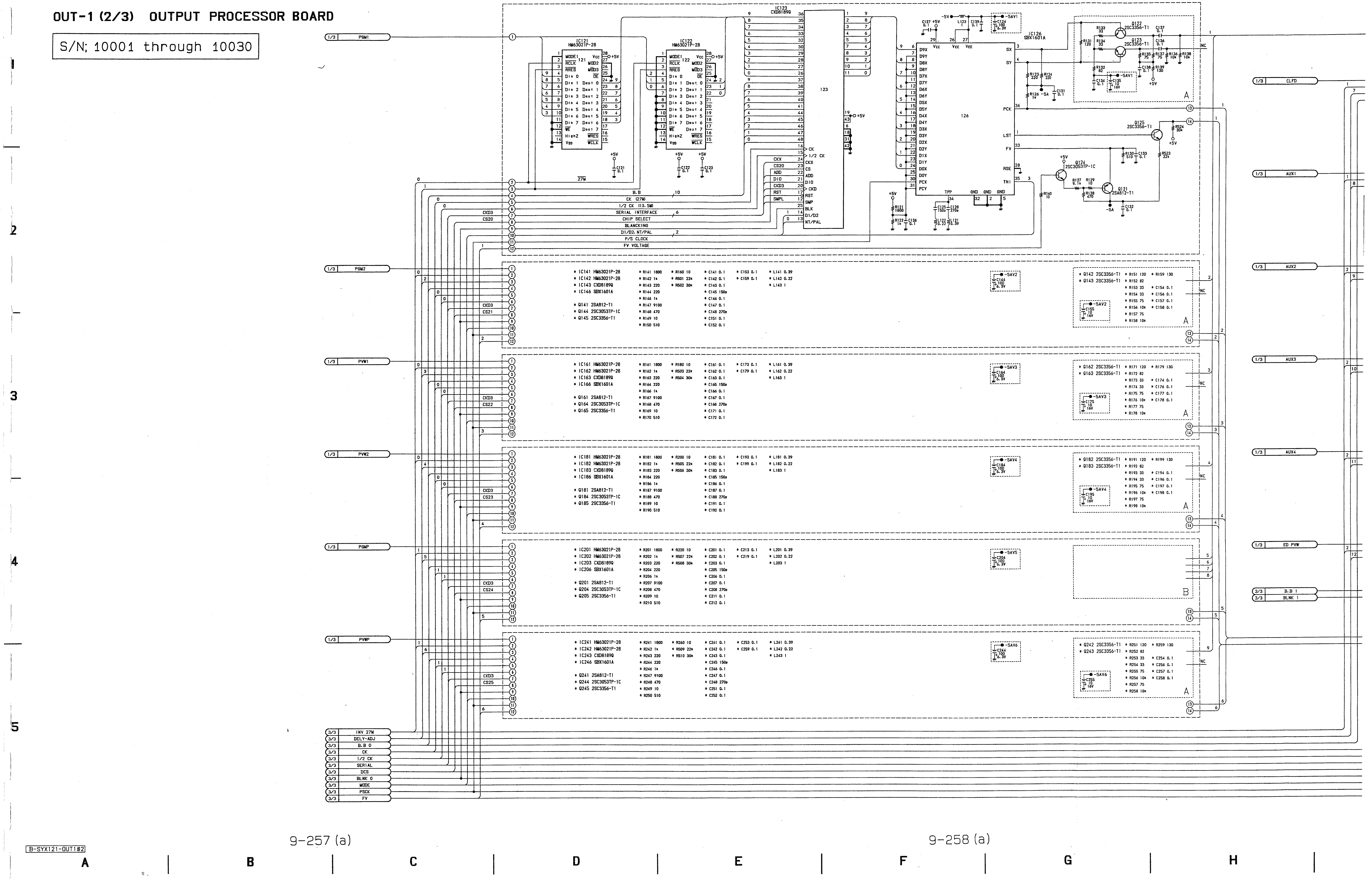

CNX1
CNY1
AUX1 9 … AUX1 0
AUX4 9 … AUX4 0
ED PVW 9 … ED PVW 0
AUX2 9 … AUX2 0
AUX3 9 … AUX3 0
PGM 19 … PGM 10
PGM 29 … PGM 20
PVW 19 … PVW 10
PVW 29 … PVW 20
PVW P9 … PVW P0
PGM P9 … PGM P0
CLFD 9 … CLFD 0
CRKV2 29 … CRKV2 20
CRKV1 19 … CRKV1 10
+5V
IC1 TC74AC574F
IC2 TC74AC574F
IC3 TC74AC574F
IC28 TC74AC574F
IC418 TC74AC574F (2/2)
IC6 TC74AC574F
IC7 TC74AC574F
IC8 TC74AC574F
IC9 TC74AC574F
IC10 TC74AC574F
IC11 TC74AC574F
IC12 TC74AC574F
IC13 TC74AC574F
IC14 TC74AC574F
IC15 TC74AC574F
IC16 TC74AC574F
IC17 TC74AC574F
IC18 TC74AC574F
IC19 TC74AC574F
IC20 TC74AC574F
IC21 TC74AC574F
IC22 TC74AC574F
IC23 TC74AC574F
IC24 TC74AC574F
IC25 CXD8026
D0 D1 D2 D3 D4 D5 D6 D7
Q0 Q1 Q2 Q3 Q4 Q5 Q6 Q7
SMPL
RST
ADD
DIO
CSL
CKD1
CKX
A3 A2 A1 A0
MODE1
UVP
SMPL
CK
RSTL
ADD
DIO
CSL
CKD
CKX
AUX1
AUX4
ED PV
AUX2
AUX3
PGM1
PGM2
PVW1
PVW2
PVWP
PGMP
CLFD
CRKV
CRKV
3/3 CK
2/3 A-OUT
3/3 SERIAL
SERIAL INTERFACE

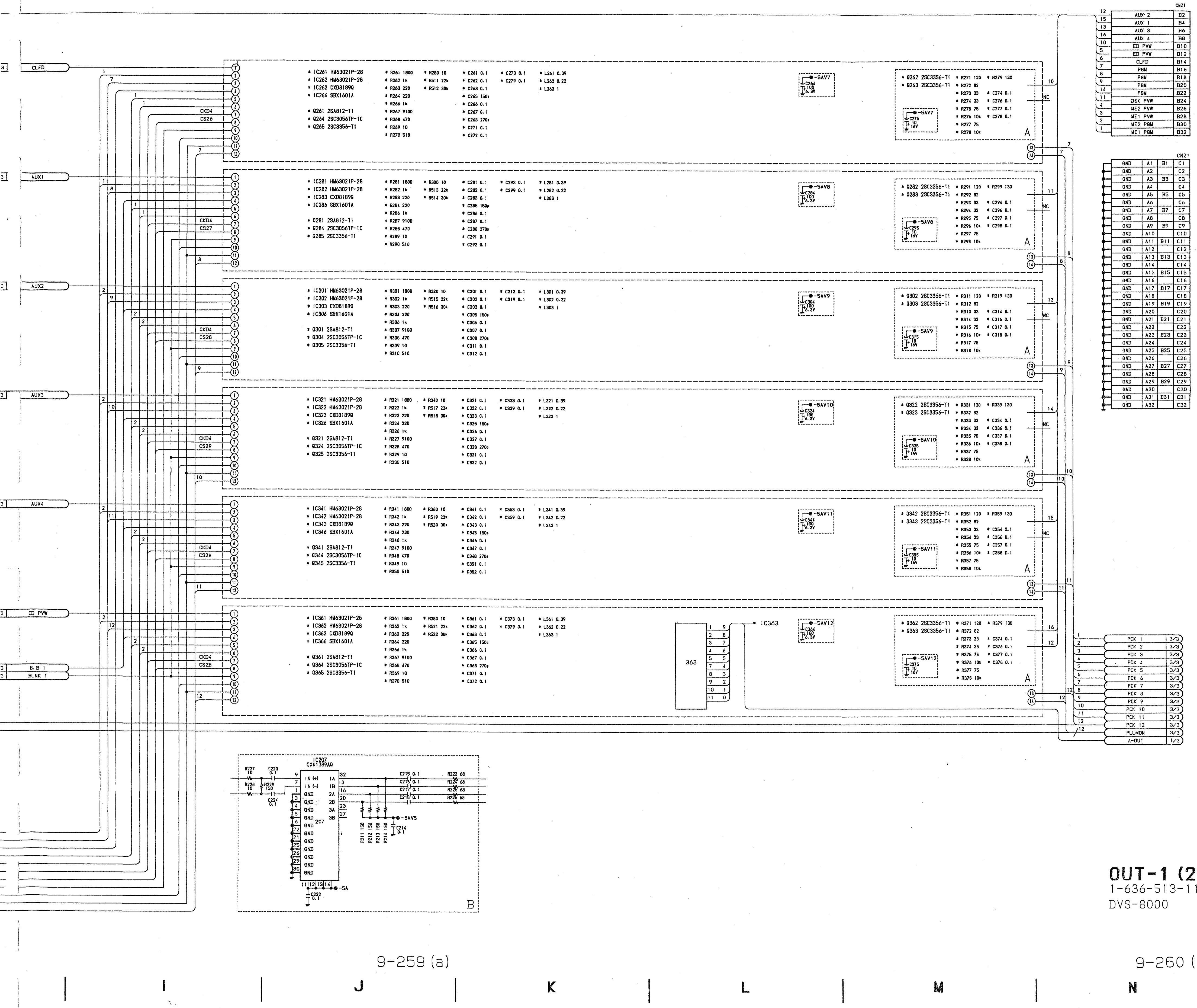
B-SYX121-OUT1#1

A B C D E F G H

OUT-1 (2/3) OUTPUT PROCESSOR BOARD

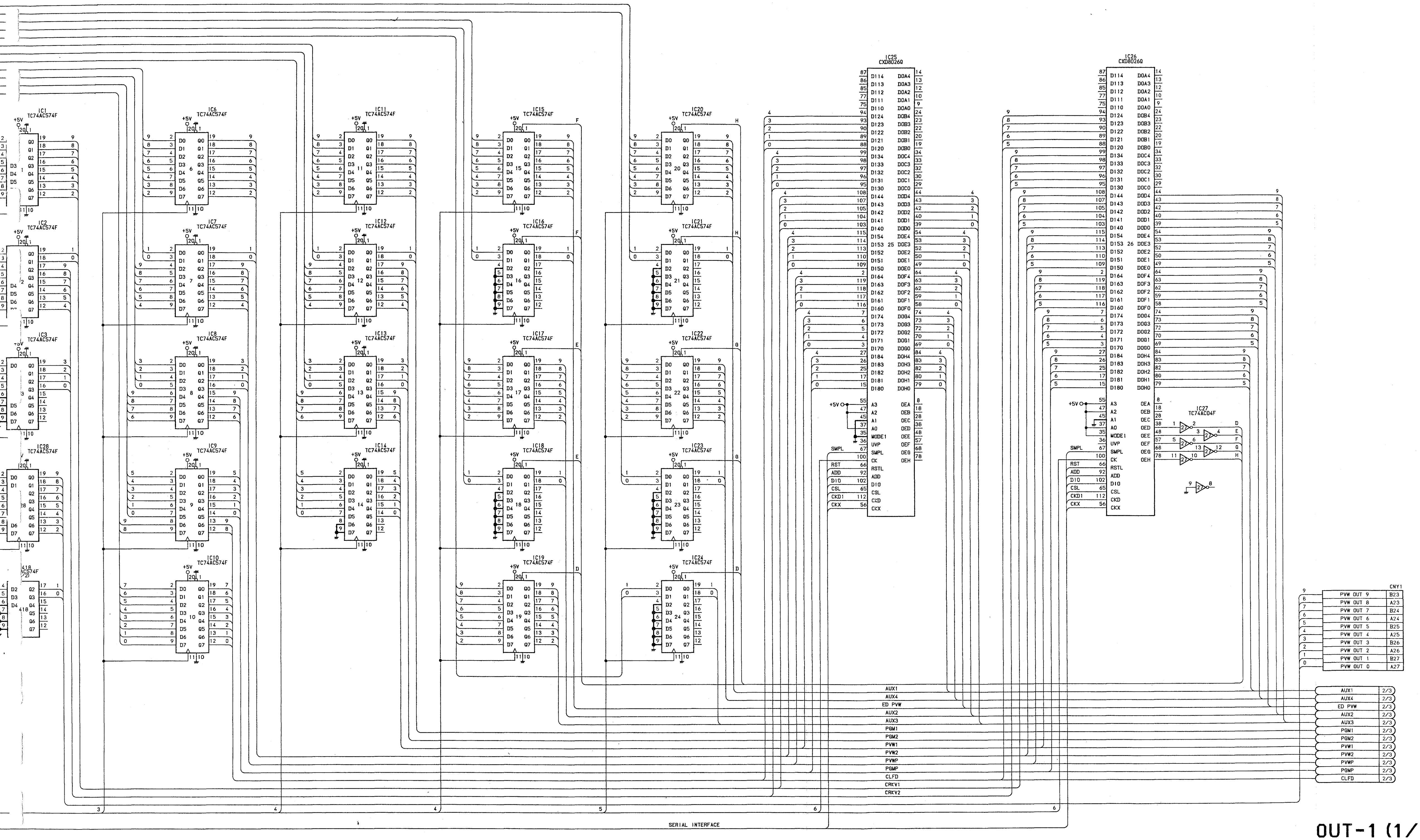
S/N; 10001 through 10030


PGM1
PGM2
PVW1
PVW2
PGMP
PVWP
CLFD
AUX1
AUX2
AUX3
AUX4
ED PVW
B.B 1
BLNK 1
IC121 HM63021P-28
IC122 HM63021P-28
IC123 CXD8189Q
IC126 SBX1601A
Q122 2SC3356-T1
Q123 2SC3356-T1
Q125 2SC3356-T1
Q124 2SC3053TP-1C
Q121 2SA812-T1
B.B
CK (27M)
1/2 CK (13.5M)
SERIAL INTERFACE
CHIP SELECT
BLANCKING
D1/D2 NT/PAL
P/S CLOCK
FV VOLTAGE
CKD3
CS20
CS21
CS22
CS23
CS24
CS25
-SAV1
-SAV2
-SAV3
-SAV4
-SAV5
-SAV6
NC
A
B
INV 27M
DELY-ADJ
B.B 0
CK
1/2 CK
SERIAL
DCS
BLNK 0
MODE
PSCK
FV
1
2
3
4
5
A
B
C
D
E
F
G
H


CLFD
AUX1
AUX2
AUX3
AUX4
ED PVW
B.B 1
BLNK 1
CKD4
CS26
CS27
CS28
CS29
CS2A
CS2B
* IC261 HM63021P-28
* IC262 HM63021P-28
* IC263 CXD8189Q
* IC266 SBX1601A
* Q261 2SA812-T1
* Q264 2SC3056TP-1C
* Q265 2SC3356-T1
* R261 1800
* R262 1k
* R263 220
* R264 220
* R266 1k
* R267 9100
* R268 470
* R269 10
* R270 510
* R280 10
* R511 22k
* R512 30k
* C261 0.1
* C262 0.1
* C263 0.1
* C265 150p
* C266 0.1
* C267 0.1
* C268 270p
* C271 0.1
* C272 0.1
* C273 0.1
* C279 0.1
* L261 0.39
* L262 0.22
* L263 1
* IC281 HM63021P-28
* IC282 HM63021P-28
* IC283 CXD8189Q
* R281 1800
* R282 1k
* R283 220
* R300 10
* R513 22k
* R514 30k
* C281 0.1
* C282 0.1
* C283 0.1
* C293 0.1
* C299 0.1
* L281 0.39
* L282 0.22
* L283 1
* Q262 2SC3356-T1
* Q263 2SC3356-T1
* R271 120
* R272 82
* R273 33
* R274 33
* R275 75
* R276 10k
* R277 75
* R278 10k
* R279 130
* C274 0.1
* C276 0.1
* C277 0.1
* C278 0.1
-5AV7
C275 10 16V
* Q282 2SC3356-T1
* Q283 2SC3356-T1
* R291 120
* R292 82
* R299 130
-5AV8
-5AV9
-5AV10
-5AV11
-5AV12
NC
A
363
IC363
CNZ1
AUX 2 B2
AUX 1 B4
AUX 3 B6
AUX 4 B8
ED PVW B10
ED PVW B12
CLFD B14
PGM B16
PGM B18
PGM B20
PGM B22
DSK PVW B24
ME2 PVW B26
ME1 PVW B28
ME2 PGM B30
ME1 PGM B32
GND
PCK 1 3/3
PCK 2 3/3
PCK 3 3/3
PCK 4 3/3
PCK 5 3/3
PCK 6 3/3
PCK 7 3/3
PCK 8 3/3
PCK 9 3/3
PCK 10 3/3
PCK 11 3/3
PCK 12 3/3
PLLMON 3/3
A-OUT 1/3
IC207
CXA1389AQ
IN (+)
IN (-)
1A
1B
2A
2B
3A
3B
207
R227 10
R228 10
R229 150
C223 0.1
C224 0.1
C215 0.1
C216 0.1
C217 0.1
C218 0.1
R223 68
R224 68
R225 68
R226 68
R211 150
R212 150
R213 150
R214 150
C214 0.1
-5AV5
C222 0.1
-5A
B

OUT-1 (2/3)

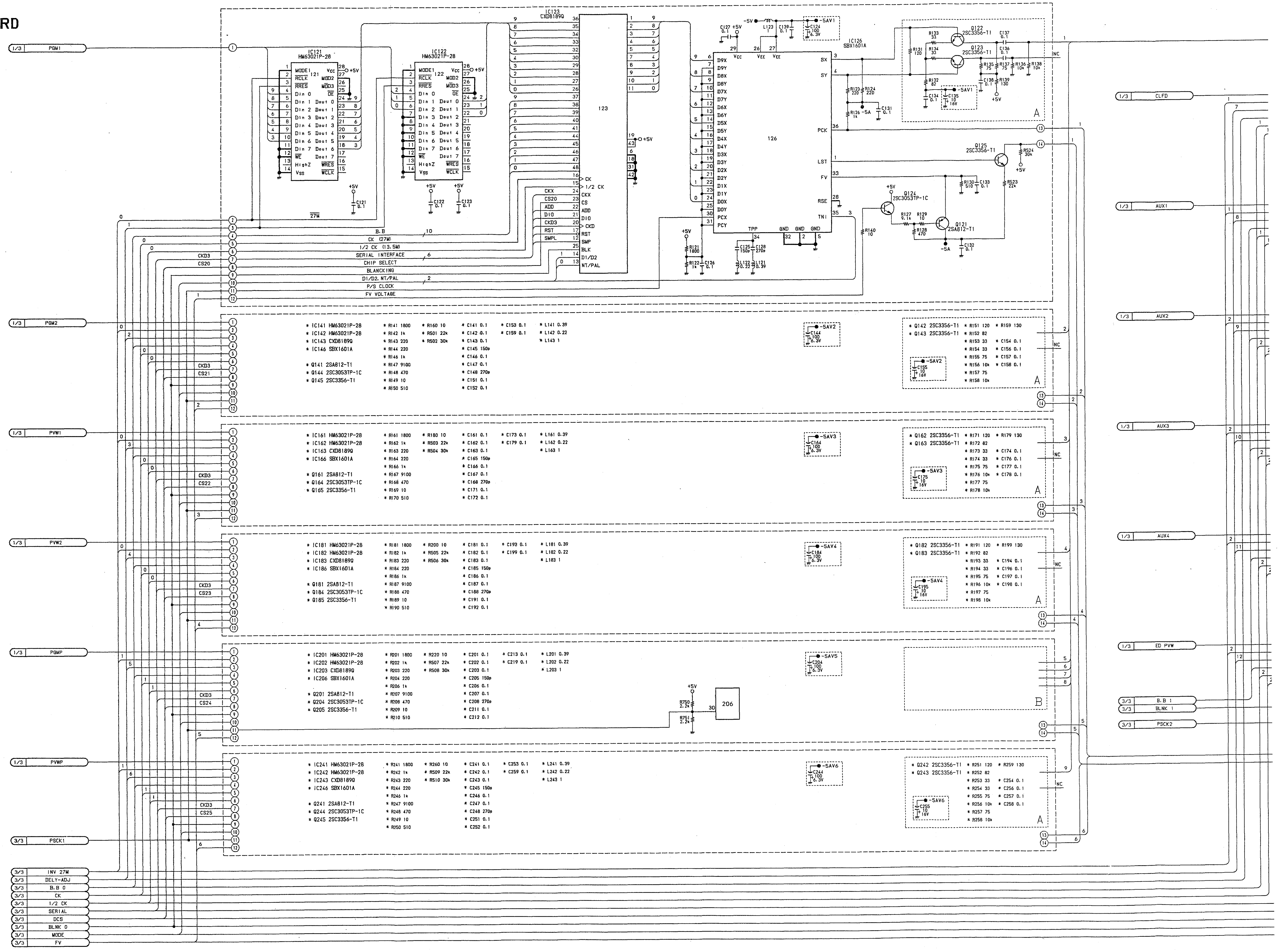
1-636-513-11
DVS-8000


IC1 TC74AC574F
IC2 TC74AC574F
IC3 TC74AC574F
IC28 TC74AC574F
IC6 TC74AC574F
IC7 TC74AC574F
IC8 TC74AC574F
IC9 TC74AC574F
IC10 TC74AC574F
IC11 TC74AC574F
IC12 TC74AC574F
IC13 TC74AC574F
IC14 TC74AC574F
IC15 TC74AC574F
IC16 TC74AC574F
IC17 TC74AC574F
IC18 TC74AC574F
IC19 TC74AC574F
IC20 TC74AC574F
IC21 TC74AC574F
IC22 TC74AC574F
IC23 TC74AC574F
IC24 TC74AC574F
IC25 CXD8026Q
IC26 CXD8026Q
IC27 TC74AC04F
+5V
SMPL
RST
ADD
DIO
CSL
CKD1
CKX
CNY1
PVW OUT 9 B23
PVW OUT 8 A23
PVW OUT 7 B24
PVW OUT 6 A24
PVW OUT 5 B25
PVW OUT 4 A25
PVW OUT 3 B26
PVW OUT 2 A26
PVW OUT 1 B27
PVW OUT 0 A27
AUX1 2/3
AUX4 2/3
ED PVW 2/3
AUX2 2/3
AUX3 2/3
PGM1 2/3
PGM2 2/3
PVW1 2/3
PVW2 2/3
PVWP 2/3
PGMP 2/3
CLFD 2/3
CRKV1
CRKV2
SERIAL INTERFACE

OUT-1 (1/3)
1-636-513-11, 12, 13
DVS-8000

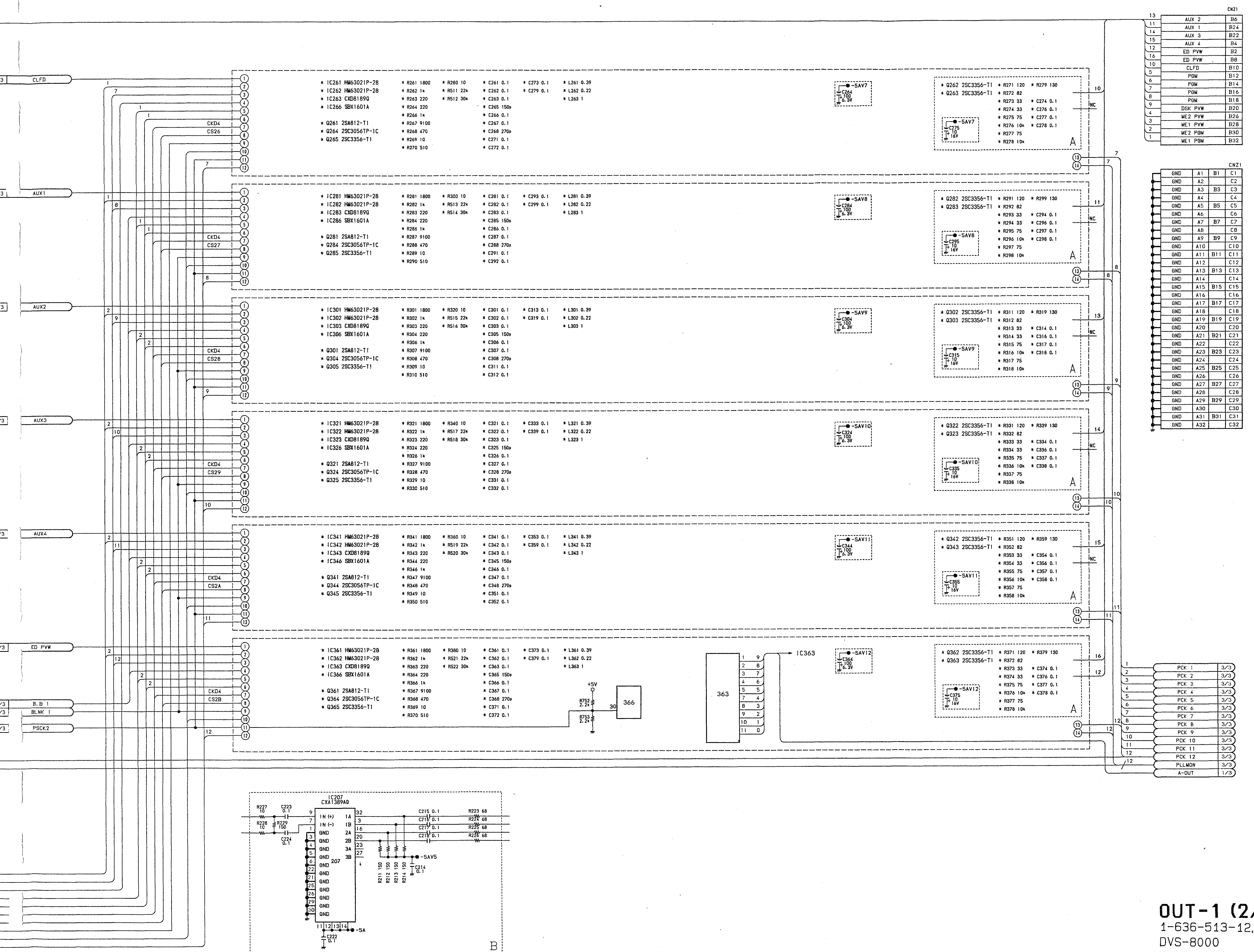
OUT-1 (2/3) OUTPUT PROCESSOR BOARD

S/N; 10031 and higher


1/3 PGM1
IC121 HM63021P-28
IC122 HM63021P-28
IC123 CXD8189Q
IC126 SBX1601A
MODE1 RCLK RRES Din 0 Din 1 Din 2 Din 3 Din 4 Din 5 Din 6 Din 7 WE HighZ Vss
Vcc MOD2 MOD3 OE Dout 0 Dout 1 Dout 2 Dout 3 Dout 4 Dout 5 Dout 6 Dout 7 WRES WCLK
+5V
C121 0.1
C122 0.1
C123 0.1
27M
B.B
CK (27M)
1/2 CK (13.5M)
SERIAL INTERFACE
CHIP SELECT
BLANCKING
D1/D2, NT/PAL
P/S CLOCK
FV VOLTAGE
CKX CS20 ADD DIO CKD3 RST SMPL
CK 1/2 CK CKX CS ADD DIO CKD RST SMP BLK D1/D2 NT/PAL
D9X D9Y D8X D8Y D7X D7Y D6X D6Y D5X D5Y D4X D4Y D3X D3Y D2X D2Y D1X D1Y D0X D0Y PCX PCY
SX SY PCK LST FV RSE TNI
Vcc VEE VEE TPP GND GND GND
-5V +5V
L123 1
C127 0.1
C139 0.1
C124 100 6.3V
-5AV1
R120 220 R124 220
R126 1k -5A
C131 0.1
R121 1800
R122 1k C126 0.1
C125 150p C128 270p
L122 0.22 L121 0.39
Q122 2SC3356-T1
Q123 2SC3356-T1
R133 33 R131 120 R134 33 R132 82
C137 0.1 C136 0.1
R135 75 R137 75 R136 10k R138 10k R139 130
C138 0.1
C134 0.1 C135 10 16V
-5AV1 +5V
INC
A
Q125 2SC3356-T1
R524 30k
R523 22k
R130 510 C133 0.1
Q124 2SC3053TP-1C
R127 9.1k R129 10
R128 470
Q121 2SA812-T1
R160 10
C132 0.1
-5A
1/3 CLFD
1/3 AUX1
1/3 PGM2
CKD3 CS21
* IC141 HM63021P-28
* IC142 HM63021P-28
* IC143 CXD8189Q
* IC146 SBX1601A
* Q141 2SA812-T1
* Q144 2SC3053TP-1C
* Q145 2SC3356-T1
* R141 1800
* R142 1k
* R143 220
* R144 220
* R146 1k
* R147 9100
* R148 470
* R149 10
* R150 510
* R160 10
* R501 22k
* R502 30k
* C141 0.1
* C142 0.1
* C143 0.1
* C145 150p
* C146 0.1
* C147 0.1
* C148 270p
* C151 0.1
* C152 0.1
* C153 0.1
* C159 0.1
* L141 0.39
* L142 0.22
* L143 1
-5AV2
C144 100 6.3V
* Q142 2SC3356-T1
* Q143 2SC3356-T1
* R151 120
* R152 82
* R153 33
* R154 33
* R155 75
* R156 10k
* R157 75
* R158 10k
* R159 130
* C154 0.1
* C156 0.1
* C157 0.1
* C158 0.1
-5AV2
C155 10 16V
NC
A
1/3 AUX2
1/3 PVW1
CKD3 CS22
* IC161 HM63021P-28
* IC162 HM63021P-28
* IC163 CXD8189Q
* IC166 SBX1601A
* Q161 2SA812-T1
* Q164 2SC3053TP-1C
* Q165 2SC3356-T1
* R161 1800
* R162 1k
* R163 220
* R164 220
* R166 1k
* R167 9100
* R168 470
* R169 10
* R170 510
* R180 10
* R503 22k
* R504 30k
* C161 0.1
* C162 0.1
* C163 0.1
* C165 150p
* C166 0.1
* C167 0.1
* C168 270p
* C171 0.1
* C172 0.1
* C173 0.1
* C179 0.1
* L161 0.39
* L162 0.22
* L163 1
-5AV3
C164 100 6.3V
* Q162 2SC3356-T1
* Q163 2SC3356-T1
* R171 120
* R172 82
* R173 33
* R174 33
* R175 75
* R176 10k
* R177 75
* R178 10k
* R179 130
* C174 0.1
* C176 0.1
* C177 0.1
* C178 0.1
-5AV3
C175 10 16V
NC
A
1/3 AUX3
1/3 PVW2
CKD3 CS23
* IC181 HM63021P-28
* IC182 HM63021P-28
* IC183 CXD8189Q
* IC186 SBX1601A
* Q181 2SA812-T1
* Q184 2SC3053TP-1C
* Q185 2SC3356-T1
* R181 1800
* R182 1k
* R183 220
* R184 220
* R186 1k
* R187 9100
* R188 470
* R189 10
* R190 510
* R200 10
* R505 22k
* R506 30k
* C181 0.1
* C182 0.1
* C183 0.1
* C185 150p
* C186 0.1
* C187 0.1
* C188 270p
* C191 0.1
* C192 0.1
* C193 0.1
* C199 0.1
* L181 0.39
* L182 0.22
* L183 1
-5AV4
C184 100 6.3V
* Q182 2SC3356-T1
* Q183 2SC3356-T1
* R191 120
* R192 82
* R193 33
* R194 33
* R195 75
* R196 10k
* R197 75
* R198 10k
* R199 130
* C194 0.1
* C196 0.1
* C197 0.1
* C198 0.1
-5AV4
C195 10 16V
NC
A
1/3 AUX4
1/3 PGMP
CKD3 CS24
* IC201 HM63021P-28
* IC202 HM63021P-28
* IC203 CXD8189Q
* IC206 SBX1601A
* Q201 2SA812-T1
* Q204 2SC3053TP-1C
* Q205 2SC3356-T1
* R201 1800
* R202 1k
* R203 220
* R204 220
* R206 1k
* R207 9100
* R208 470
* R209 10
* R210 510
* R220 10
* R507 22k
* R508 30k
* C201 0.1
* C202 0.1
* C203 0.1
* C205 150p
* C206 0.1
* C207 0.1
* C208 270p
* C211 0.1
* C212 0.1
* C213 0.1
* C219 0.1
* L201 0.39
* L202 0.22
* L203 1
-5AV5
C204 100 6.3V
+5V
R750 2.2k
R751 2.2k
206
B
1/3 ED PVW
3/3 B.B 1
3/3 BLNK 1
3/3 PSCK2
1/3 PVWP
CKD3 CS25
* IC241 HM63021P-28
* IC242 HM63021P-28
* IC243 CXD8189Q
* IC246 SBX1601A
* Q241 2SA812-T1
* Q244 2SC3053TP-1C
* Q245 2SC3356-T1
* R241 1800
* R242 1k
* R243 220
* R244 220
* R246 1k
* R247 9100
* R248 470
* R249 10
* R250 510
* R260 10
* R509 22k
* R510 30k
* C241 0.1
* C242 0.1
* C243 0.1
* C245 150p
* C246 0.1
* C247 0.1
* C248 270p
* C251 0.1
* C252 0.1
* C253 0.1
* C259 0.1
* L241 0.39
* L242 0.22
* L243 1
-5AV6
C244 100 6.3V
* Q242 2SC3356-T1
* Q243 2SC3356-T1
* R251 120
* R252 82
* R253 33
* R254 33
* R255 75
* R256 10k
* R257 75
* R258 10k
* R259 130
* C254 0.1
* C256 0.1
* C257 0.1
* C258 0.1
-5AV6
C255 10 16V
NC
A
3/3 PSCK1
3/3 INV 27M
3/3 DELY-ADJ
3/3 B.B 0
3/3 CK
3/3 1/2 CK
3/3 SERIAL
3/3 DCS
3/3 BLNK 0
3/3 MODE
3/3 FV

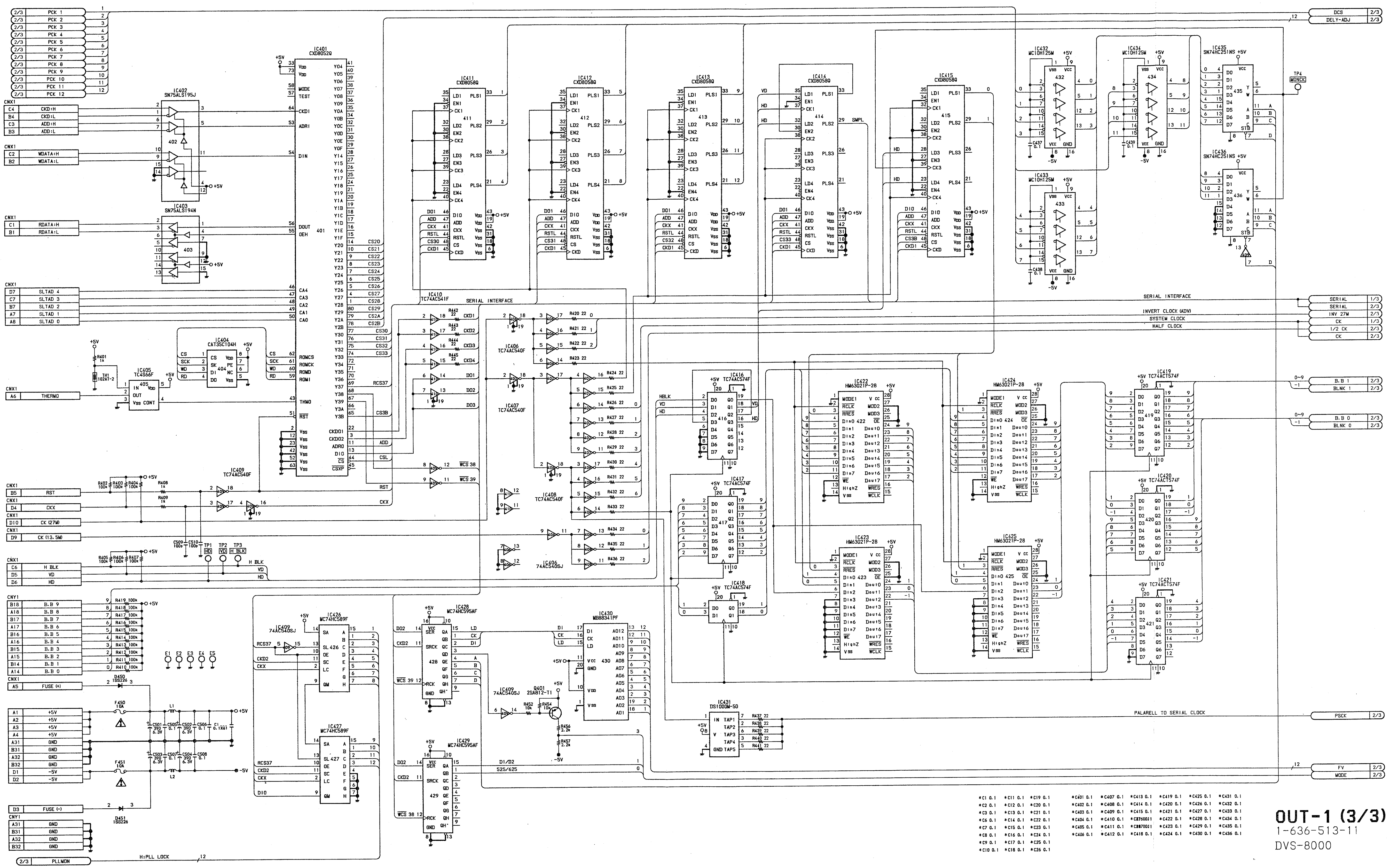
B-SYX121-OUT1-13#2

A | B | C | D | E | F | G | H |


CLFD
AUX1
AUX2
AUX3
AUX4
ED PVW
B.B 1
BLNK 1
PSCK2
CKD4
CS26
CS27
CS28
CS29
CS2A
CS2B
* IC261 HM63021P-28
* IC262 HM63021P-28
* IC263 CXD8189Q
* IC266 SBX1601A
* Q261 2SA812-T1
* Q264 2SC3056TP-1C
* Q265 2SC3356-T1
* R261 1800
* R262 1k
* R263 220
* R264 220
* R266 1k
* R267 9100
* R268 470
* R269 10
* R270 510
* R280 10
* R511 22k
* R512 30k
* C261 0.1
* C262 0.1
* C263 0.1
* C265 150p
* C266 0.1
* C267 0.1
* C268 270p
* C271 0.1
* C272 0.1
* C273 0.1
* C279 0.1
* L261 0.39
* L262 0.22
* L263 1
* IC281 HM63021P-28
* IC282 HM63021P-28
* IC283 CXD8189Q
* IC286 SBX1601A
* Q281 2SA812-T1
* Q284 2SC3056TP-1C
* Q285 2SC3356-T1
* IC301 HM63021P-28
* IC302 HM63021P-28
* IC303 CXD8189Q
* IC306 SBX1601A
* IC321 HM63021P-28
* IC322 HM63021P-28
* IC323 CXD8189Q
* IC326 SBX1601A
* IC341 HM63021P-28
* IC342 HM63021P-28
* IC343 CXD8189Q
* IC346 SBX1601A
* IC361 HM63021P-28
* IC362 HM63021P-28
* IC363 CXD8189Q
* IC366 SBX1601A
* Q262 2SC3356-T1
* Q263 2SC3356-T1
-SAV7
-SAV8
-SAV9
-SAV10
-SAV11
-SAV12
NC
A
363
366
IC363
+5V
30
CNZ1
AUX 2 B6
AUX 1 B24
AUX 3 B22
AUX 4 B4
ED PVW B2
ED PVW B8
CLFD B10
PGM B12
PGM B14
PGM B16
PGM B18
DSK PVW B20
ME2 PVW B26
ME1 PVW B28
ME2 PGM B30
ME1 PGM B32
GND
PCK 1
PCK 2
PCK 3
PCK 4
PCK 5
PCK 6
PCK 7
PCK 8
PCK 9
PCK 10
PCK 11
PCK 12
PLLMON
A-OUT
3/3
1/3
IC207
CXA1389AQ
207
IN (+)
IN (-)
GND
1A
1B
2A
2B
3A
3B
-SAV5
-5A
R227 10
R228 10
R229 150
C223 0.1
C224 0.1
C222 0.1
C214 0.1
C215 0.1
C216 0.1
C217 0.1
R223 68
R224 68
R226 68
R211 150
R212 150
R213 150
R214 150
B

OUT-1 (2/3)
1-636-513-12, 13
DVS-8000

OUT-1 (3/3) OUTPUT PROCESSOR BOARD S/N; 10001 through 10030


1
2
3
4
5
PCK 1
PCK 2
PCK 3
PCK 4
PCK 5
PCK 6
PCK 7
PCK 8
PCK 9
PCK 10
PCK 11
PCK 12
CNX1
CKD:H
CKD:L
ADD:H
ADD:L
WDATA:H
WDATA:L
RDATA:H
RDATA:L
SLTAD 4
SLTAD 3
SLTAD 2
SLTAD 1
SLTAD 0
THERMO
RST
CKX
CK (27M)
CK (13.5M)
H BLK
VD
HD
B.B 9
B.B 8
B.B 7
B.B 6
B.B 5
B.B 4
B.B 3
B.B 2
B.B 1
B.B 0
FUSE (+)
FUSE (-)
+5V
GND
-5V
PLLMON
H:PLL LOCK
IC401 CXD8052Q
IC402 SN75ALS195J
IC403 SN75ALS194N
IC404 CAT35C104H
IC405 TC4S66F
IC406 TC74AC540F
IC407 TC74AC540F
IC408 TC74AC540F
IC409 TC74AC540F
IC410 TC74AC541F
IC411 CXD8058Q
IC412 CXD8058Q
IC413 CXD8058Q
IC414 CXD8058Q
IC415 CXD8058Q
IC416 TC74AC574F
IC417 TC74AC574F
IC418 TC74AC574F
IC419 TC74AC574F
IC420 TC74AC574F
IC421 TC74AC574F
IC422 HM63021P-28
IC423 HM63021P-28
IC424 HM63021P-28
IC425 HM63021P-28
IC426 MC74HC589F
IC427 MC74HC589F
IC428 MC74HC595AF
IC429 MC74HC595AF
IC430 MB88341PF
IC431 DS1000M-50
IC432 MC10H125M
IC433 MC10H125M
IC434 MC10H125M
IC435 SN74HC251NS
IC436 SN74HC251NS
Q401 2SA812-T1
D450 1SS226
D451 1SS226
F450 1.0A
F451 1.0A
TP1 HD
TP2 VD
TP3 H BLK
TP4 MONCK
E1 E2 E3 E4 E5
SERIAL INTERFACE
INVERT CLOCK (ADV)
SYSTEM CLOCK
HALF CLOCK
PALARELL TO SERIAL CLOCK
DCS
DELY-ADJ
SERIAL
INV 27M
CK
1/2 CK
B.B 1
BLNK 1
B.B 0
BLNK 0
PSCK
FV
MODE
1/3
2/3

OUT-1 (3/3)
1-636-513-11
DVS-8000

9-263 (a)

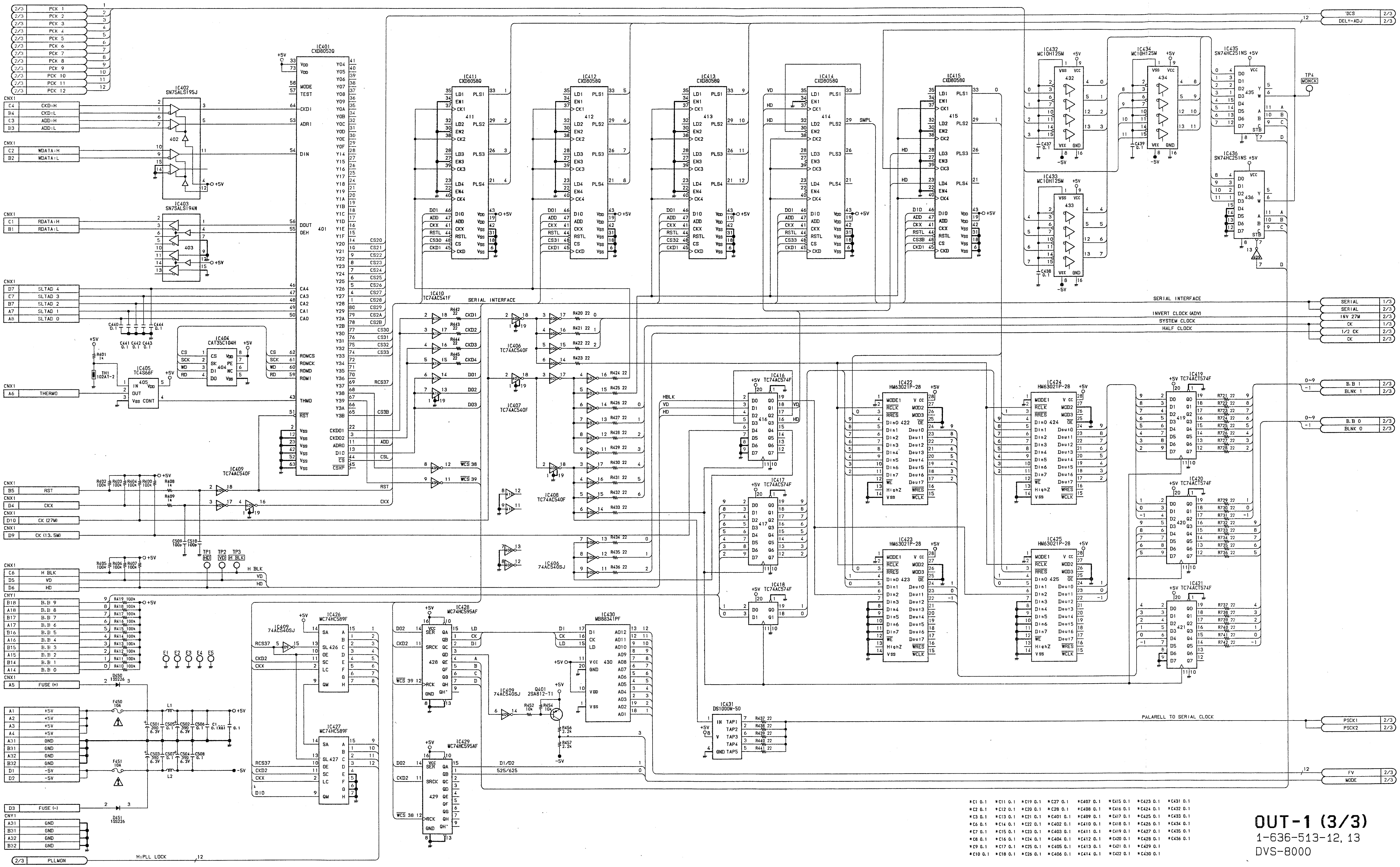
9-264 (a)

B-SYX121-OUT1#3

A | B | C | D | E | F | G | H

OUT-1 (3/3) OUTPUT PROCESSOR BOARD

S/N; 10031 and higher


1
2
3
4
5
IC401 CXD8052Q
IC402 SN75ALS195J
IC403 SN75ALS194M
IC404 CAT35C104H
IC405 TC4S66F
IC406 TC74AC540F
IC407 TC74AC540F
IC408 TC74AC540F
IC409 TC74AC540F
IC410 TC74AC541F
IC411 CXD8058Q
IC412 CXD8058Q
IC413 CXD8058Q
IC414 CXD8058Q
IC415 CXD8058Q
IC416 TC74AC574F
IC417 TC74AC574F
IC418 TC74AC574F
IC419 TC74ACT574F
IC420 TC74ACT574F
IC421 TC74ACT574F
IC422 HM63021P-28
IC423 HM63021P-28
IC424 HM63021P-28
IC425 HM63021P-28
IC426 MC74HC589F
IC427 MC74HC589F
IC428 MC74HC595AF
IC429 MC74HC595AF
IC430 MB88341PF
IC431 DS1000M-50
IC432 MC10H125M
IC433 MC10H125M
IC434 MC10H125M
IC435 SN74HC251NS
IC436 SN74HC251NS
Q401 2SA812-T1
SERIAL INTERFACE
INVERT CLOCK (ADV)
SYSTEM CLOCK
HALF CLOCK
PALARELL TO SERIAL CLOCK
HiPLL LOCK
PLLMON
TP4 MONCK

OUT-1 (3/3)
1-636-513-12, 13
DVS-8000

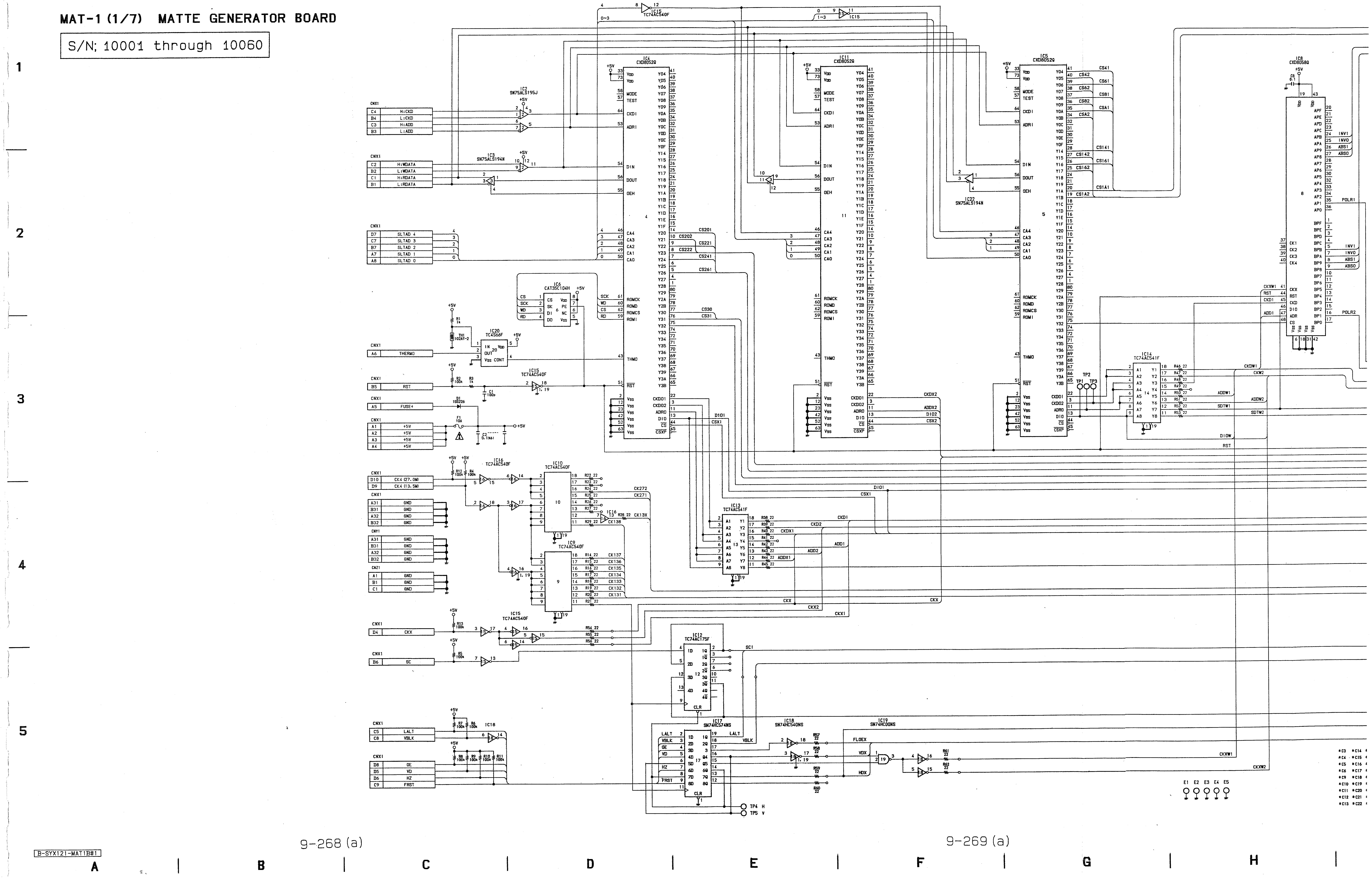
9-263 (b) 9-264 (b)

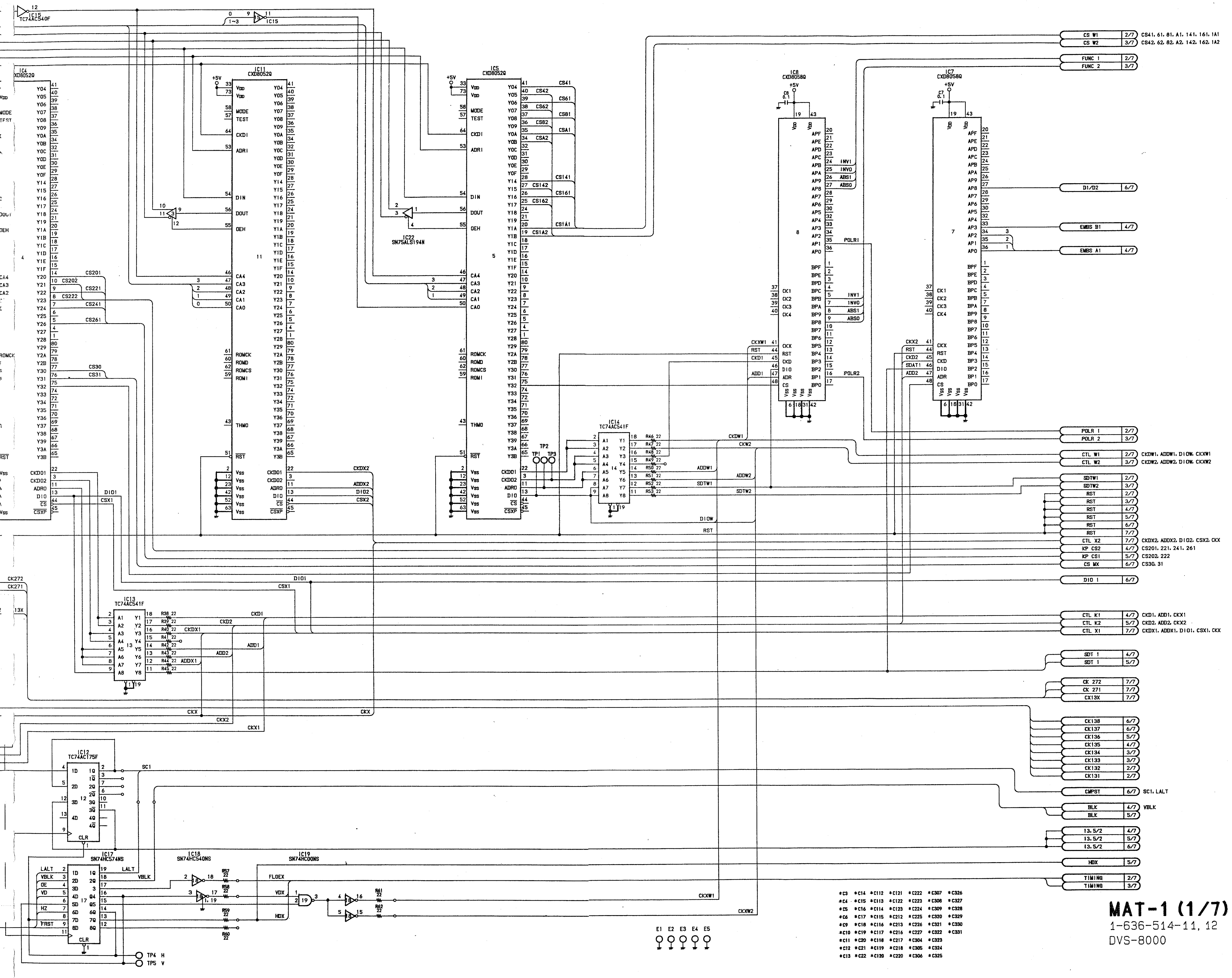
B-SYX121-OUT1-13#3

A | B | C | D | E | F | G | H

MAT-1 (1/7) MATTE GENERATOR BOARD

S/N; 10001 through 10060


1
2
3
4
5
A
B
C
D
E
F
G
H
CNX1
C4 H:CKD
B4 L:CKD
C3 H:ADD
B3 L:ADD
C2 H:WDATA
B2 L:WDATA
C1 H:RDATA
B1 L:RDATA
D7 SLTAD 4
C7 SLTAD 3
B7 SLTAD 2
A7 SLTAD 1
A8 SLTAD 0
A6 THERMO
B5 RST
A5 FUSE+
A1 +5V
A2 +5V
A3 +5V
A4 +5V
D10 CK4 (27.0M)
D9 CK4 (13.5M)
GND
CNY1
CNZ1
D4 CKX
B6 SC
C5 LALT
C8 VBLK
D8 OE
D5 VD
D6 HZ
C9 FRST
IC2 SN75ALS195J
IC3 SN75ALS194N
IC22 SN75ALS194N
IC4 CXD8052Q
IC11 CXD8052Q
IC5 CXD8052Q
IC8 CXD8058Q
IC6 CAT35C104H
IC20 TC4S66F
IC15 TC74AC540F
IC16 TC74AC540F
IC10 TC74AC540F
IC9 TC74AC540F
IC13 TC74AC541F
IC14 TC74AC541F
IC12 TC74AC175F
IC17 SN74HC574NS
IC18 SN74HC540NS
IC19 SN74HC00NS
TP1 TP2 TP3
TP4 H
TP5 V
E1 E2 E3 E4 E5
CS41 CS42 CS61 CS62 CS81 CS82 CSA1 CSA2
CS141 CS142 CS161 CS162 CS1A1 CS1A2
CS201 CS202 CS221 CS222 CS241 CS261
CS30 CS31
INV1 INV0 ABS1 ABS0
POLR1 POLR2
CKDW1 CKW2 ADDW1 ADDW2 SDTW1 SDTW2 DIOW RST
CKDX2 ADDX2 DIO2 CSX2 DIO1 CSX1 CKD1 CKD2 CKDX1 ADD1 ADD2 ADDX1
CK272 CK271 CK13X CK138 CK137 CK136 CK135 CK134 CK133 CK132 CK131
CKX CKX2 CKX1 SC1
LALT VBLK FLOEX VDX HDX CKXW1 CKXW2


IC15 TC74AC540F
IC4 CXD8052Q
IC11 CXD8052Q
IC5 CXD8052Q
IC22 SN75ALS194N
IC8 CXD8058Q
IC7 CXD8058Q
IC14 TC74AC541F
IC13 TC74AC541F
IC12 TC74AC175F
IC17 SN74HC574NS
IC18 SN74HC540NS
IC19 SN74HC00NS
TP1 TP2 TP3
TP4 H
TP5 V
E1 E2 E3 E4 E5
CS W1 2/7 CS41, 61, 81, A1, 141, 161, 1A1
CS W2 3/7 CS42, 62, 82, A2, 142, 162, 1A2
FUNC 1 2/7
FUNC 2 3/7
D1/D2 6/7
EMBS B1 4/7
EMBS A1 4/7
POLR 1 2/7
POLR 2 3/7
CTL W1 2/7 CKDW1, ADDW1, DIOW, CKXW1
CTL W2 3/7 CKDW2, ADDW2, DIOW, CKXW2
SDTW1 2/7
SDTW2 3/7
RST 2/7
RST 3/7
RST 4/7
RST 5/7
RST 6/7
RST 7/7
CTL X2 7/7 CKDX2, ADDX2, DIO2, CSX2, CKX
KP CS2 4/7 CS201, 221, 241, 261
KP CS1 5/7 CS202, 222
CS MX 6/7 CS30, 31
DIO 1 6/7
CTL K1 4/7 CKD1, ADD1, CKX1
CTL K2 5/7 CKD2, ADD2, CKX2
CTL X1 7/7 CKDX1, ADDX1, DIO1, CSX1, CKX
SDT 1 4/7
SDT 1 5/7
CK 272 7/7
CK 271 7/7
CK13X 7/7
CK138 6/7
CK137 6/7
CK136 5/7
CK135 4/7
CK134 3/7
CK133 3/7
CK132 2/7
CK131 2/7
CMPST 6/7 SC1, LALT
BLK 4/7 VBLK
BLK 5/7
13.5/2 4/7
13.5/2 5/7
13.5/2 6/7
HDX 5/7
TIMING 2/7
TIMING 3/7

MAT-1 (1/7)
1-636-514-11, 12
DVS-8000

MAT-1 MATTE GENERATOR BOARD

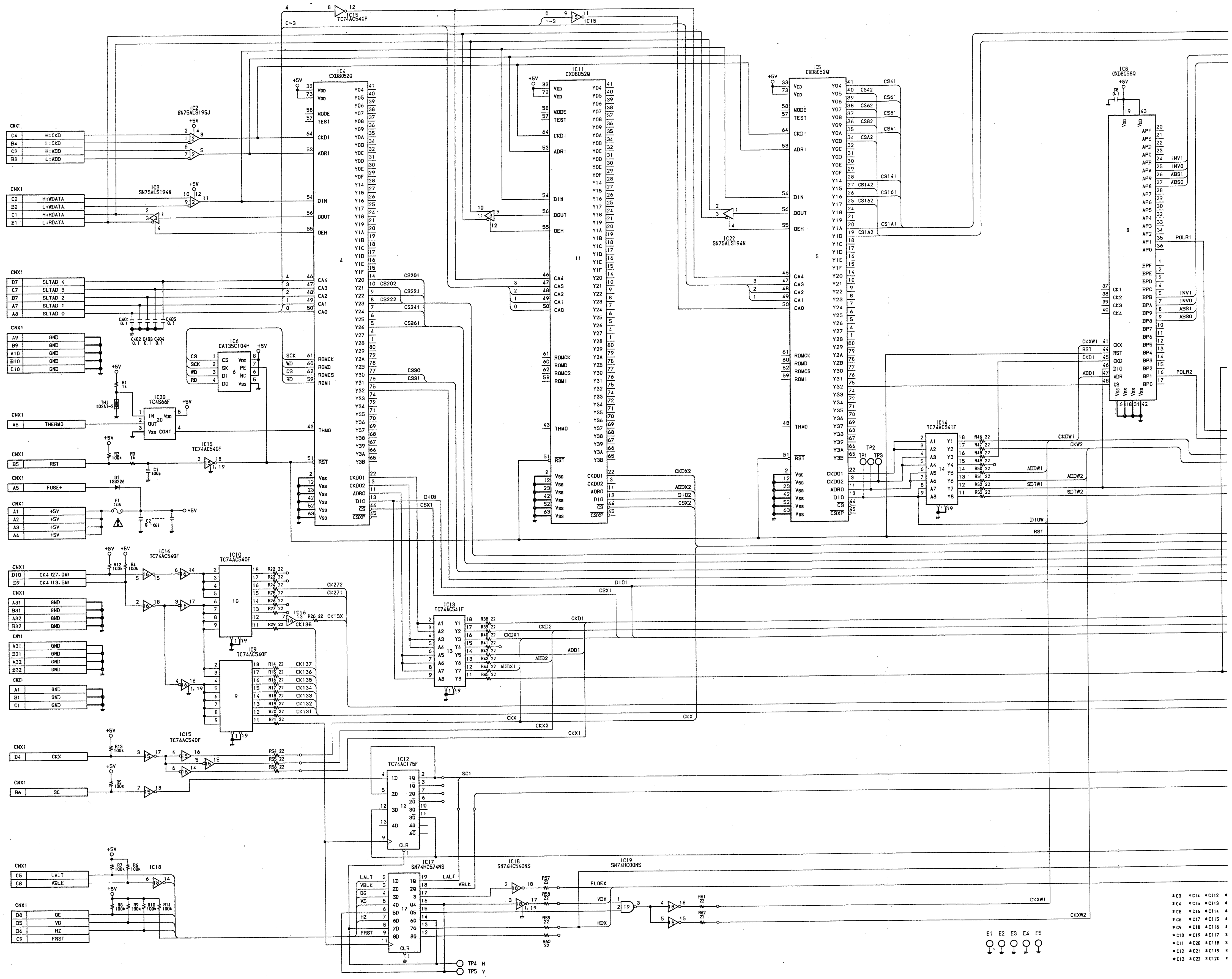
S/N; 10061 and higher

2

3

4

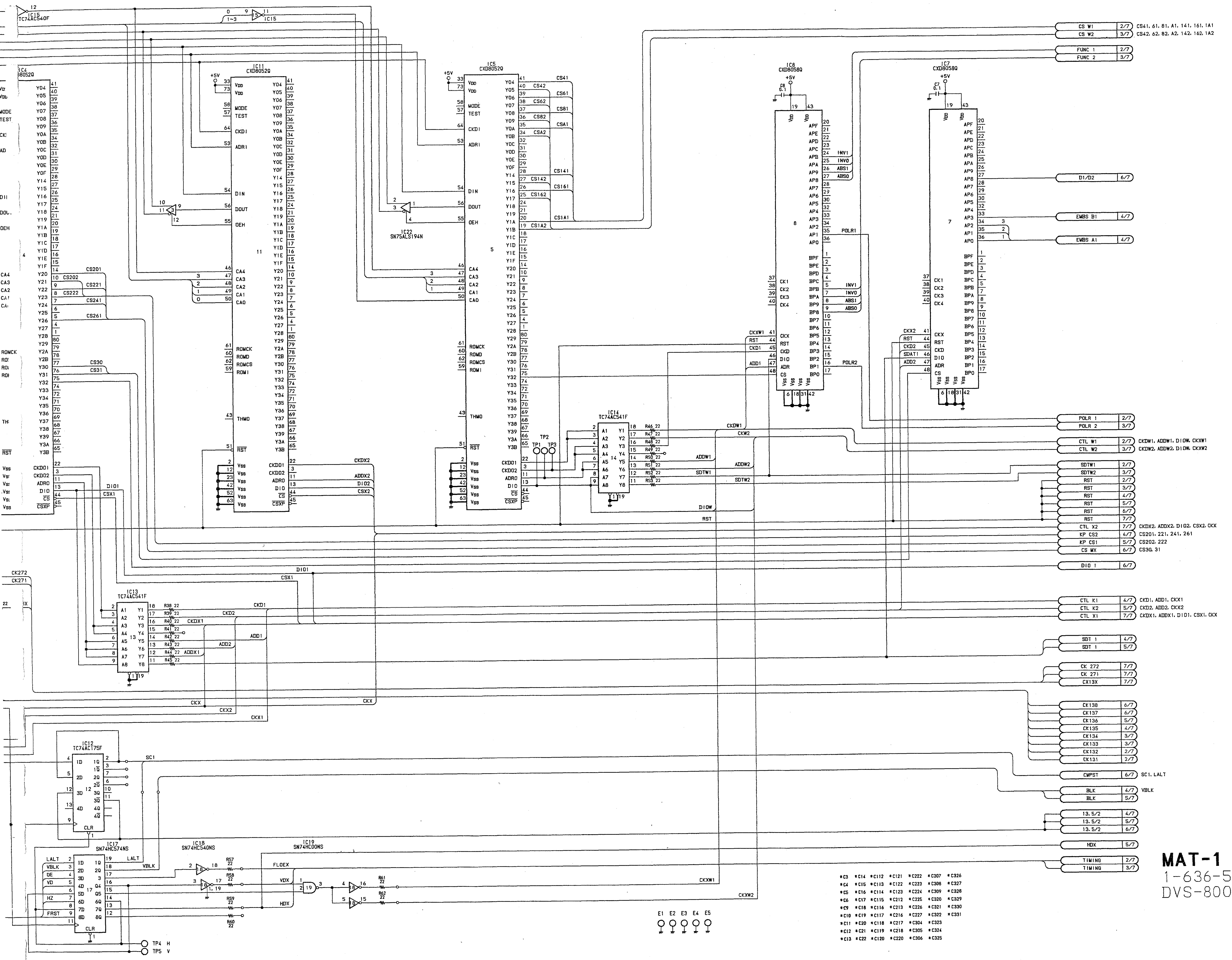
5


IC4 CXD8052Q
IC11 CXD8052Q
IC5 CXD8052Q
IC8 CXD8058Q
IC2 SN75ALS195J
IC3 SN75ALS194N
IC22 SN75ALS194N
IC6 CAT35C104H
IC20 TC4S66F
IC15 TC74AC540F
IC16 TC74AC540F
IC10 TC74AC540F
IC9 TC74AC540F
IC13 TC74AC541F
IC14 TC74AC541F
IC12 TC74AC175F
IC17 SN74HC574NS
IC18 SN74HC540NS
IC19 SN74HC00NS
CNX1
H:CKD
L:CKD
H:ADD
L:ADD
H:WDATA
L:WDATA
H:RDATA
L:RDATA
SLTAD 4
SLTAD 3
SLTAD 2
SLTAD 1
SLTAD 0
GND
THERMO
RST
FUSE+
+5V
CK4 (27.0M)
CK4 (13.5M)
CKX
SC
LALT
VBLK
OE
VD
HZ
FRST
TP1
TP2
TP3
TP4 H
TP5 V
E1 E2 E3 E4 E5
CKXW1
CKXW2
POLR1
POLR2
DIOW
SDTW1
SDTW2
ADDW1
ADDW2
CKDW1
CKW2
SC1
FLDEX
VDX
HDX

9-268 (b)

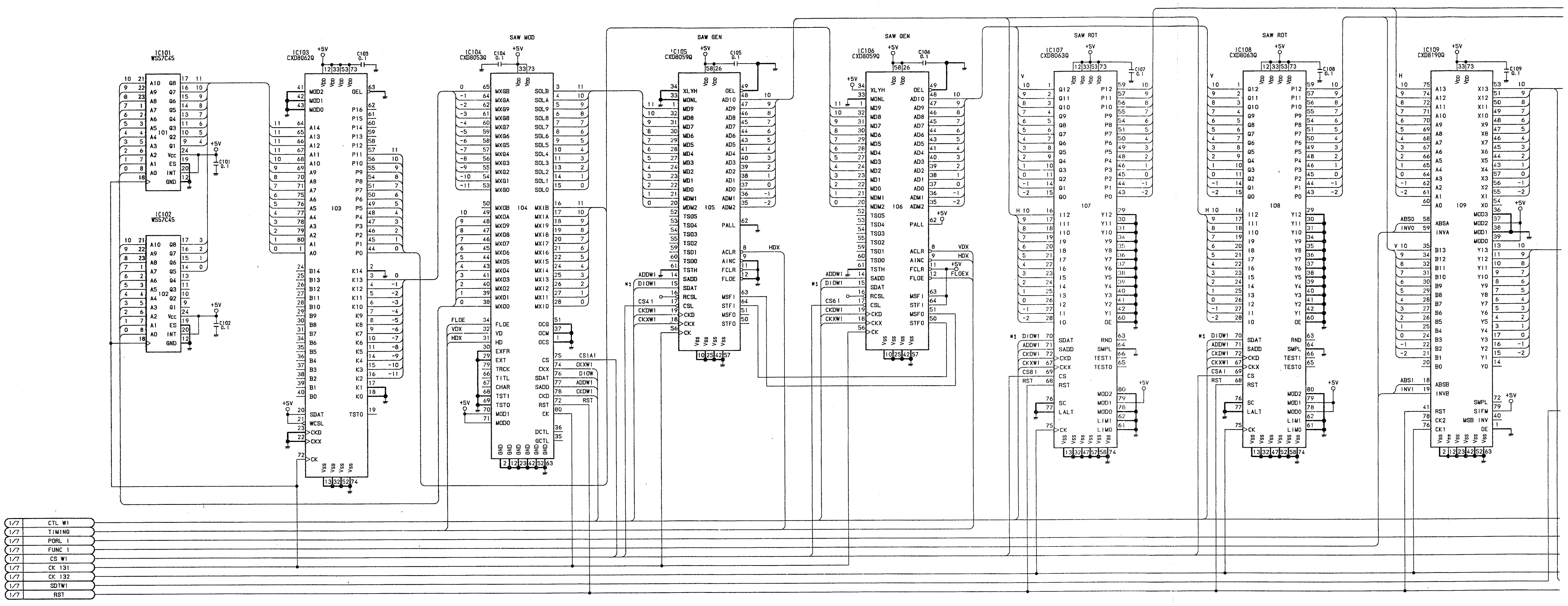
9-269 (b)

A | B | C | D | E | F | G | H |

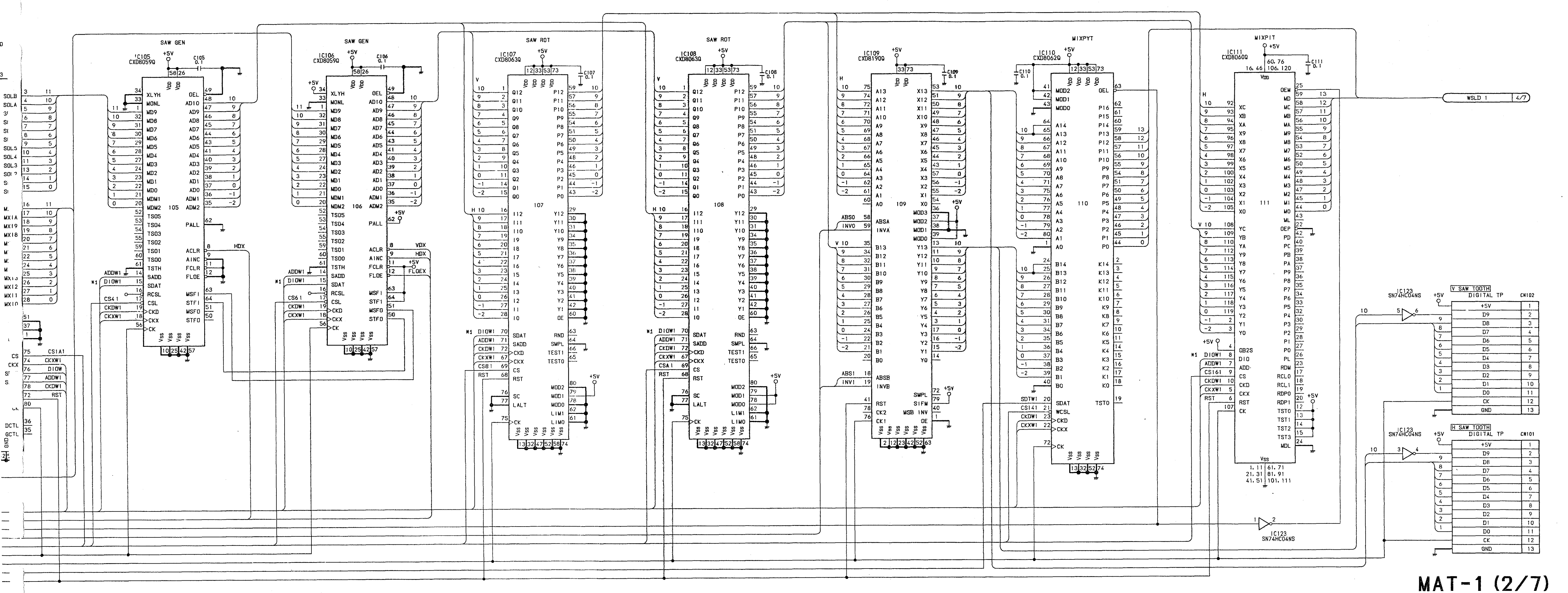

IC15 TC74AC540F
IC4 CXD8052Q
IC11 CXD8052Q
IC5 CXD8052Q
IC22 SN75ALS194N
IC8 CXD8056Q
IC7 CXD8056Q
IC14 TC74AC541F
IC13 TC74AC541F
IC12 TC74ACT75F
IC17 SN74HC574NS
IC18 SN74HC540NS
IC19 SN74HC00NS
TP1 TP2 TP3
TP4 H
TP5 V
E1 E2 E3 E4 E5
CS W1 2/7 CS41, 61, 81, A1, 141, 161, 1A1
CS W2 3/7 CS42, 62, 82, A2, 142, 162, 1A2
FUNC 1 2/7
FUNC 2 3/7
D1/D2 6/7
EMBS B1 4/7
EMBS A1 4/7
POLR 1 2/7
POLR 2 3/7
CTL W1 2/7 CKDW1, ADDW1, DIOW, CKXW1
CTL W2 3/7 CKDW2, ADDW2, DIOW, CKXW2
SDTW1 2/7
SDTW2 3/7
RST 2/7
RST 3/7
RST 4/7
RST 5/7
RST 6/7
RST 7/7
CTL X2 7/7 CKDX2, ADDX2, DIO2, CSX2, CKX
KP CS2 4/7 CS201, 221, 241, 261
KP CS1 5/7 CS202, 222
CS MX 6/7 CS30, 31
DIO 1 6/7
CTL K1 4/7 CKD1, ADD1, CKX1
CTL K2 5/7 CKD2, ADD2, CKX2
CTL X1 7/7 CKDX1, ADDX1, DIO1, CSX1, CKX
SDT 1 4/7
SDT 1 5/7
CK 272 7/7
CK 271 7/7
CK13X 7/7
CK138 6/7
CK137 6/7
CK136 5/7
CK135 4/7
CK134 3/7
CK133 3/7
CK132 2/7
CK131 3/7
CMPST 6/7 SC1, LALT
BLK 4/7 VBLK
BLK 5/7
13.5/2 4/7
13.5/2 5/7
13.5/2 6/7
HDX 5/7
TIMING 2/7
TIMING 3/7

MAT-1 (1/7)
1-636-514-13
DVS-8000

MAT-1 (2/7) MATTE GENERATOR BOARD


IC101
WS57C45
IC102
WS57C45
IC103
CXD8062Q
103
IC104
CXD8053Q
104
SAW MOD
IC105
CXD8059Q
105
SAW GEN
IC106
CXD8059Q
106
SAW GEN
IC107
CXD8063Q
107
SAW ROT
IC108
CXD8063Q
108
SAW ROT
IC109
CXD8190Q
109
+5V
C101 0.1
C102 0.1
C103 0.1
C104 0.1
C105 0.1
C106 0.1
C107 0.1
C108 0.1
C109 0.1
HDX
VDX
FLOEX
1/7 CTL W1
1/7 TIMING
1/7 PORL 1
1/7 FUNC 1
1/7 CS W1
1/7 CK 131
1/7 CK 132
1/7 SDTW1
1/7 RST

Note: *1-----(-13)board is "DIOW".


SAW GEN
IC105
CXD8059Q
105
SAW GEN
IC106
CXD8059Q
106
SAW ROT
IC107
CXD8063Q
107
SAW ROT
IC108
CXD8063Q
108
IC109
CXD8190Q
109
MIXPYT
IC110
CXD8062Q
110
MIXPIT
IC111
CXD8060Q
111
WSLD 1
4/7
IC123
SN74HC04NS
V SAW TOOTH
DIGITAL TP
CN102
H SAW TOOTH
DIGITAL TP
CN101
+5V
HDX
VDX
FLDEX

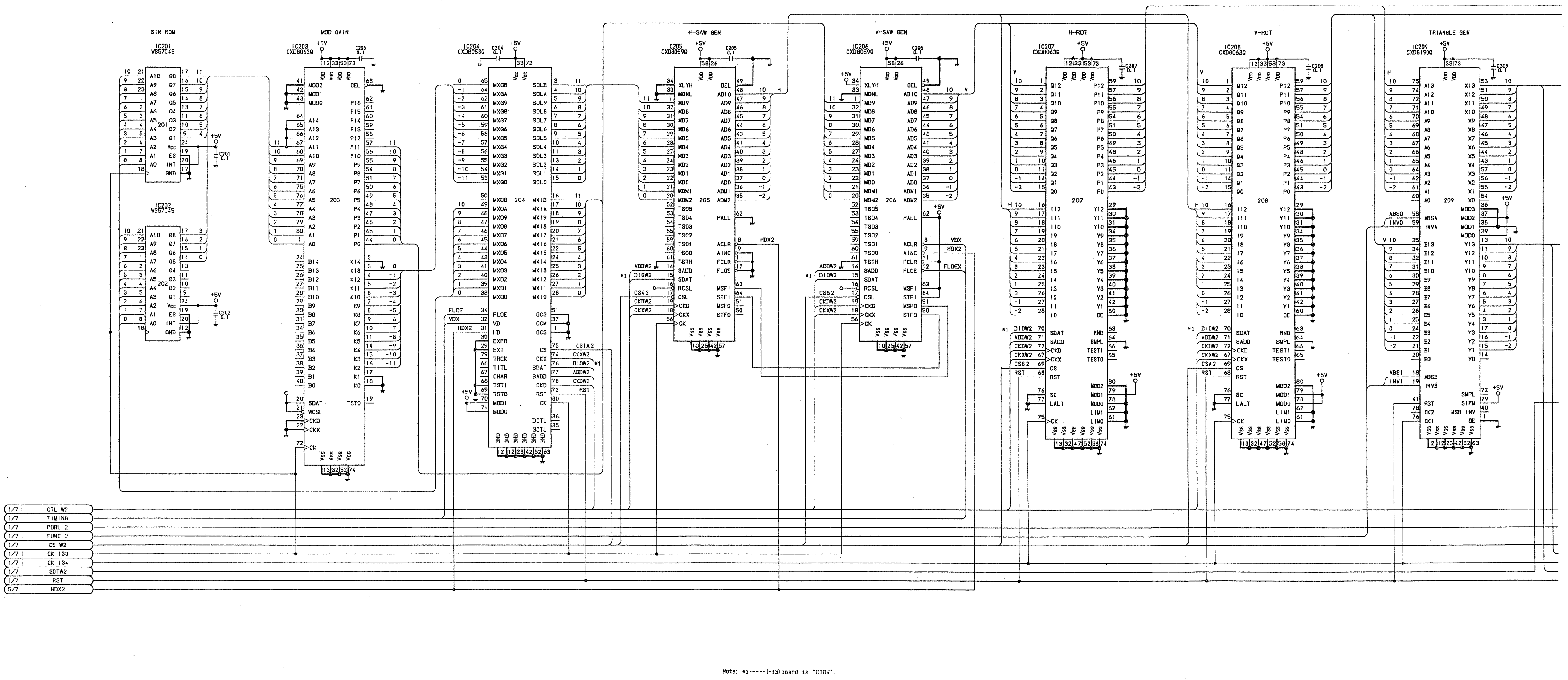
Note: ※1-----(-13) board is "DIOW".

MAT-1 (2/7)

1-636-514-11, 12, 13

DVS-8000

MAT-1 (3/7) MATTE GENERATOR BOARD


SIN ROM
IC201
W557C45
IC202
W557C45
MOD GAIN
IC203
CXD8062Q
IC204
CXD8053Q
H-SAW GEN
IC205
CXD8059Q
V-SAW GEN
IC206
CXD8059Q
H-ROT
IC207
CXD8063Q
V-ROT
IC208
CXD8063Q
TRIANGLE GEN
IC209
CXD8195Q
+5V
1/7 CTL W2
1/7 TIMING
1/7 PGRL 2
1/7 FUNC 2
1/7 CS W2
1/7 CK 133
1/7 CK 134
1/7 SDTW2
1/7 RST
5/7 HDX2

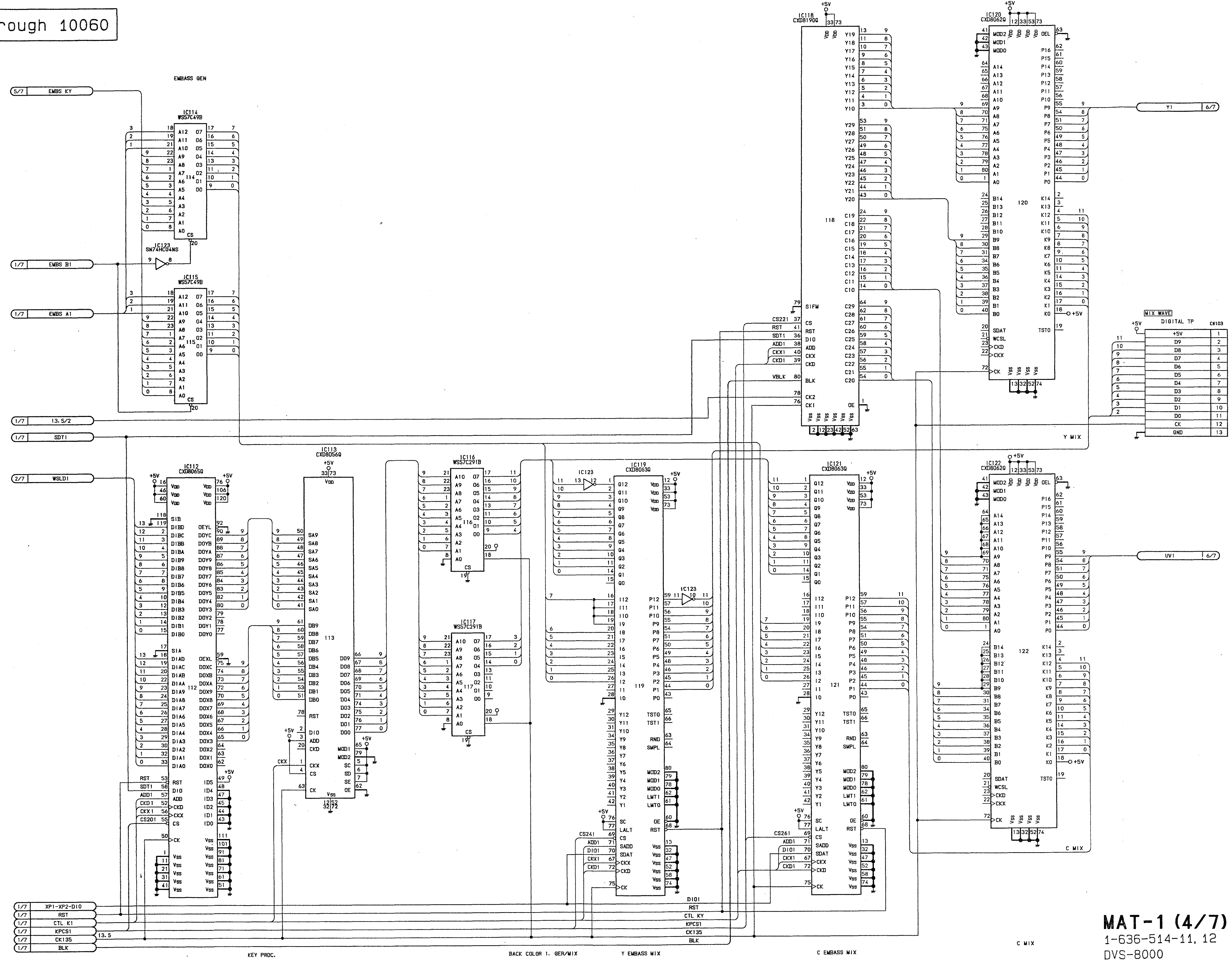
Note: *1-----(-13)board is "DIOW".

3

A | B | C | D | E | F | G | H |

MAT-1 (4/7) MATTE GENERATOR BOARD

S/N; 10001 through 10060

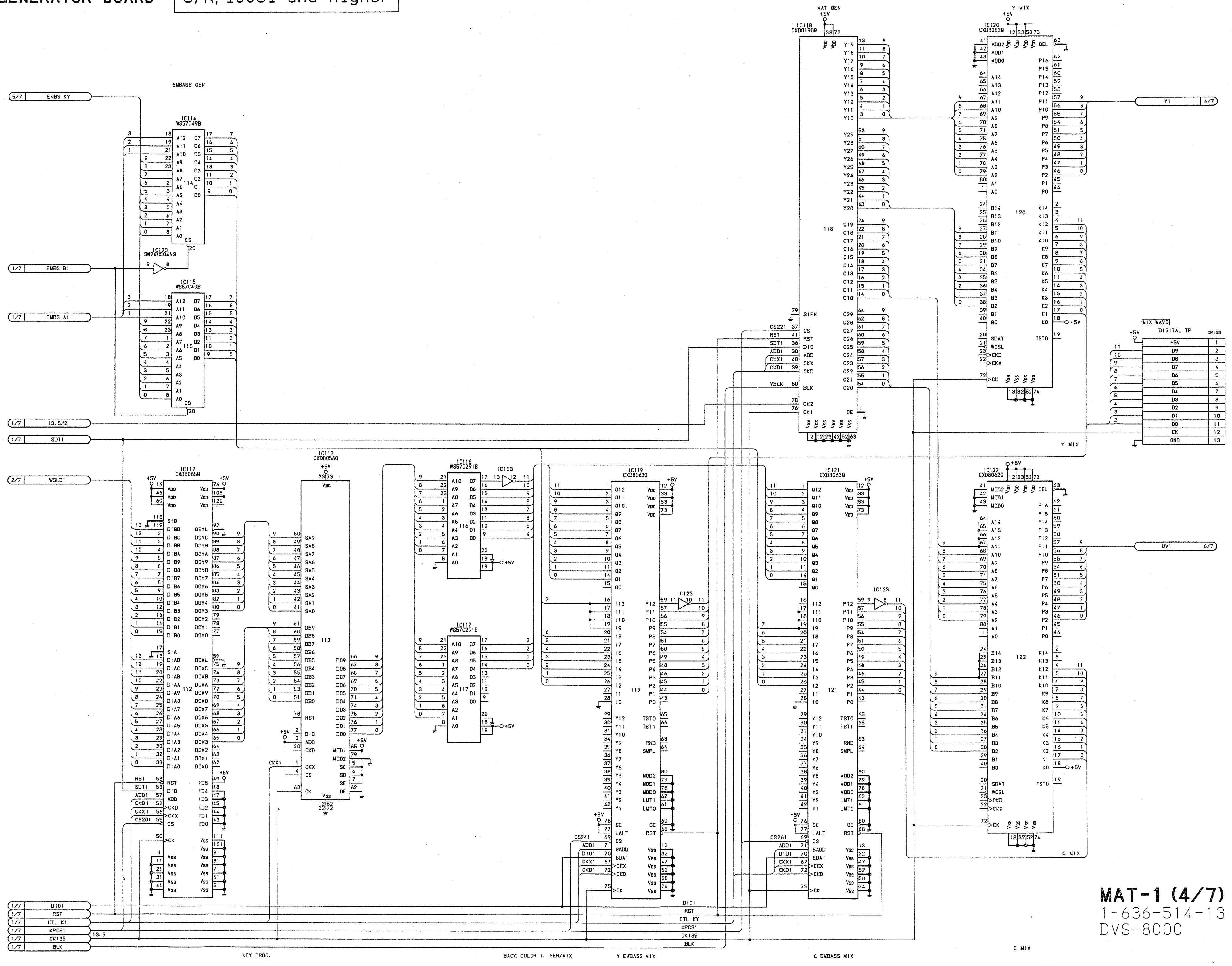

1
2
3
4
5
EMBASS GEN
5/7 EMBS KY
1/7 EMBS B1
1/7 EMBS A1
IC114 WS57C49B
IC115 WS57C49B
IC123 SN74HC04NS
1/7 13.5/2
1/7 SDT1
2/7 WSLD1
IC112 CXD8065Q
IC113 CXD8056Q
IC116 WS57C291B
IC117 WS57C291B
IC119 CXD8063Q
IC121 CXD8063Q
IC118 CXD8190Q
MAT GEN
IC120 CXD8062Q
Y MIX
IC122 CXD8062Q
C MIX
Y1 6/7
UV1 6/7
MIX WAVE
DIGITAL TP
CN103
+5V
D9
D8
D7
D6
D5
D4
D3
D2
D1
D0
CK
GND
1/7 XP1-XP2-DI0
1/7 RST
1/7 CTL K1
1/7 KPCS1
1/7 CK135
1/7 BLK
13.5
DI01
RST
CTL KY
KPCS1
CK135
BLK
KEY PROC.
BACK COLOR 1. GER/MIX
Y EMBASS MIX
C EMBASS MIX
C MIX

MAT-1 (4/7)
1-636-514-11, 12
DVS-8000

A B C D E F G H

MAT-1 MATTE GENERATOR BOARD

S/N; 10061 and higher


1
2
3
4
5
EMBASS GEN
5/7 EMBS KY
IC114 WS57C49B
IC123 SN74HC04NS
1/7 EMBS B1
IC115 WS57C49B
1/7 EMBS A1
1/7 13.5/2
1/7 SDT1
2/7 WSLD1
MAT GEN
IC118 CXD8190Q
Y MIX
IC120 CXD8062Q
Y1 6/7
MIX WAVE
DIGITAL TP
CN103
+5V 1
D9 2
D8 3
D7 4
D6 5
D5 6
D4 7
D3 8
D2 9
D1 10
D0 11
CK 12
GND 13
IC112 CXD8065Q
IC113 CXD8056Q
IC116 WS57C291B
IC117 WS57C291B
IC119 CXD8063Q
IC121 CXD8063Q
IC122 CXD8062Q
UV1 6/7
C MIX
1/7 DIO1
1/7 RST
1/7 CTL K1
1/7 KPCS1
1/7 CK135
1/7 BLK
13.5
KEY PROC.
BACK COLOR 1. GEN/MIX
Y EMBASS MIX
C EMBASS MIX

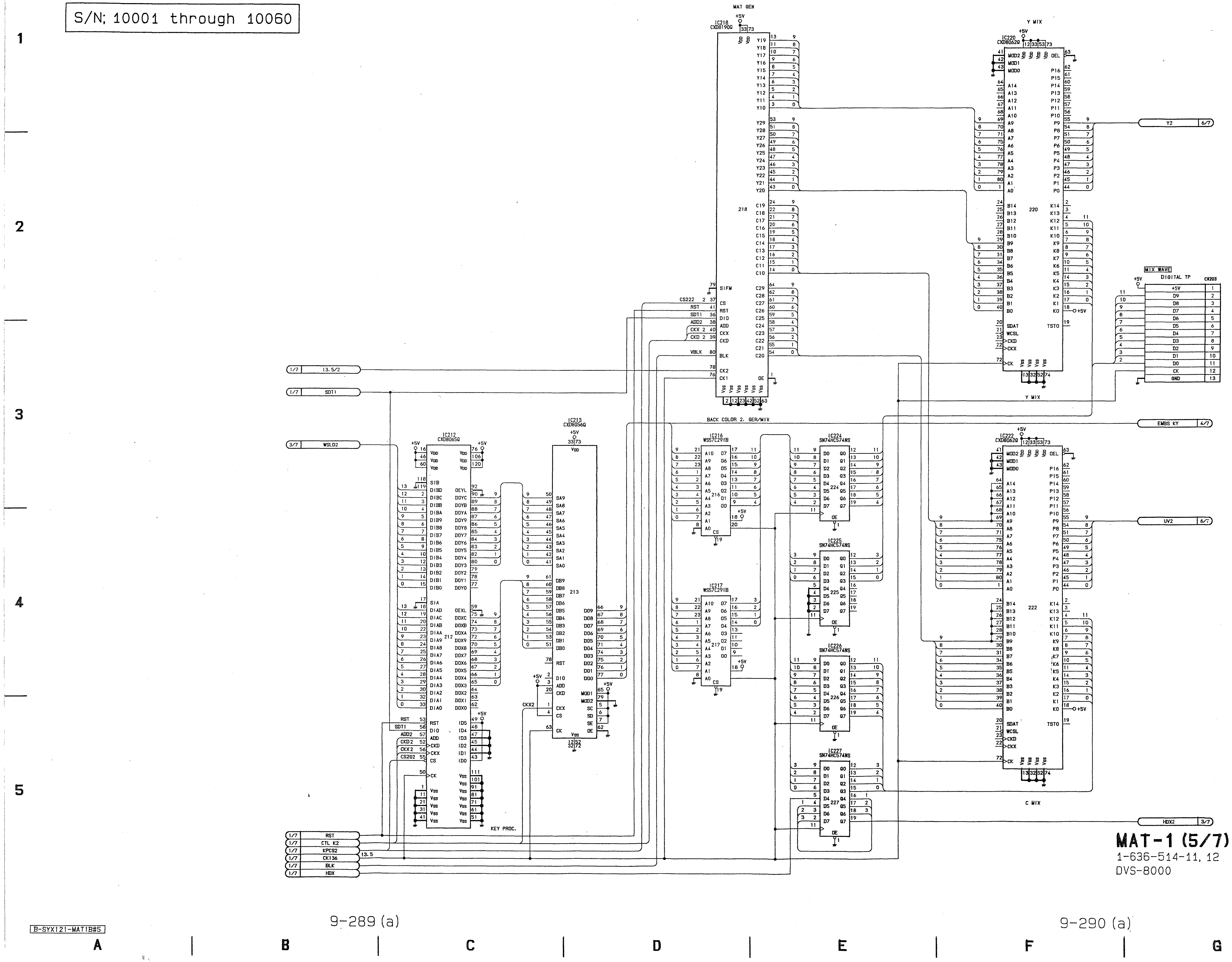
MAT-1 (4/7)
1-636-514-13
DVS-8000

B-SYX121-MAT1-13#4

A | B | C | D | E | F | G | H

MAT-1 (5/7) MATTE GENERATOR BOARD

S/N; 10001 through 10060


1
2
3
4
5
MAT GEN
IC218
CXD8190Q
218
Y MIX
IC220
CXD8062Q
220
MIX WAVE
DIGITAL TP
CN203
13.5/2
SDT1
WSLD2
BACK COLOR 2. GEN/MIX
IC212
CXD8065Q
212
IC213
CXD8056Q
213
IC216
WS57C291B
IC217
WS57C291B
IC224
SN74HC574NS
IC225
SN74HC574NS
IC226
SN74HC574NS
IC227
SN74HC574NS
IC222
CXD8062Q
222
Y2
EMBS KY
UV2
C MIX
KEY PROC.
RST
CTL K2
KPCS2
CK136
BLK
HDX
HDX2
A
B
C
D
E
F
G
H

MAT-1 (5/7)
1-636-514-11, 12
DVS-8000

B-SYX121-MAT1B#5

MAT-1 MATTE GENERATOR BOARD

S/N; 10061 and higher

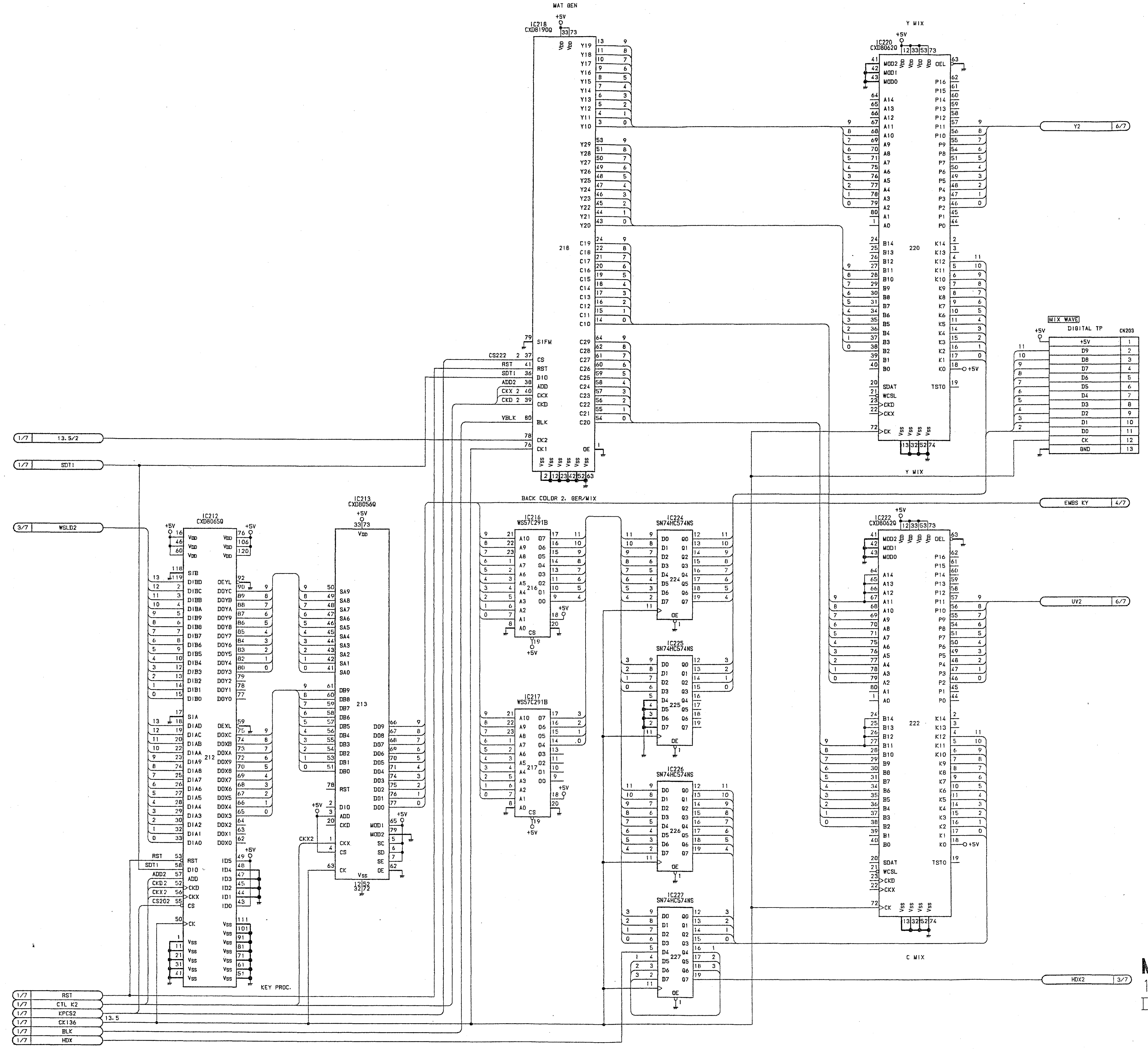
1

2

3

4

5


MAT GEN
IC218 CXD8190Q
218
Y MIX
IC220 CXD8062Q
220
IC222 CXD8062Q
222
C MIX
IC212 CXD8065Q
212
IC213 CXD8056Q
213
KEY PROC.
BACK COLOR 2. GEN/MIX
IC216 WS57C291B
IC217 WS57C291B
IC224 SN74HC574NS
IC225 SN74HC574NS
IC226 SN74HC574NS
IC227 SN74HC574NS
MIX WAVE
DIGITAL TP
CN203
Y2 6/7
UV2 6/7
EMBS KY 4/7
HDX2 3/7
1/7 13.5/2
1/7 SDT1
3/7 WSLD2
1/7 RST
1/7 CTL K2
1/7 KPCS2
1/7 CK136
1/7 BLK
1/7 HDX
13.5
+5V

MAT-1 (5/7)

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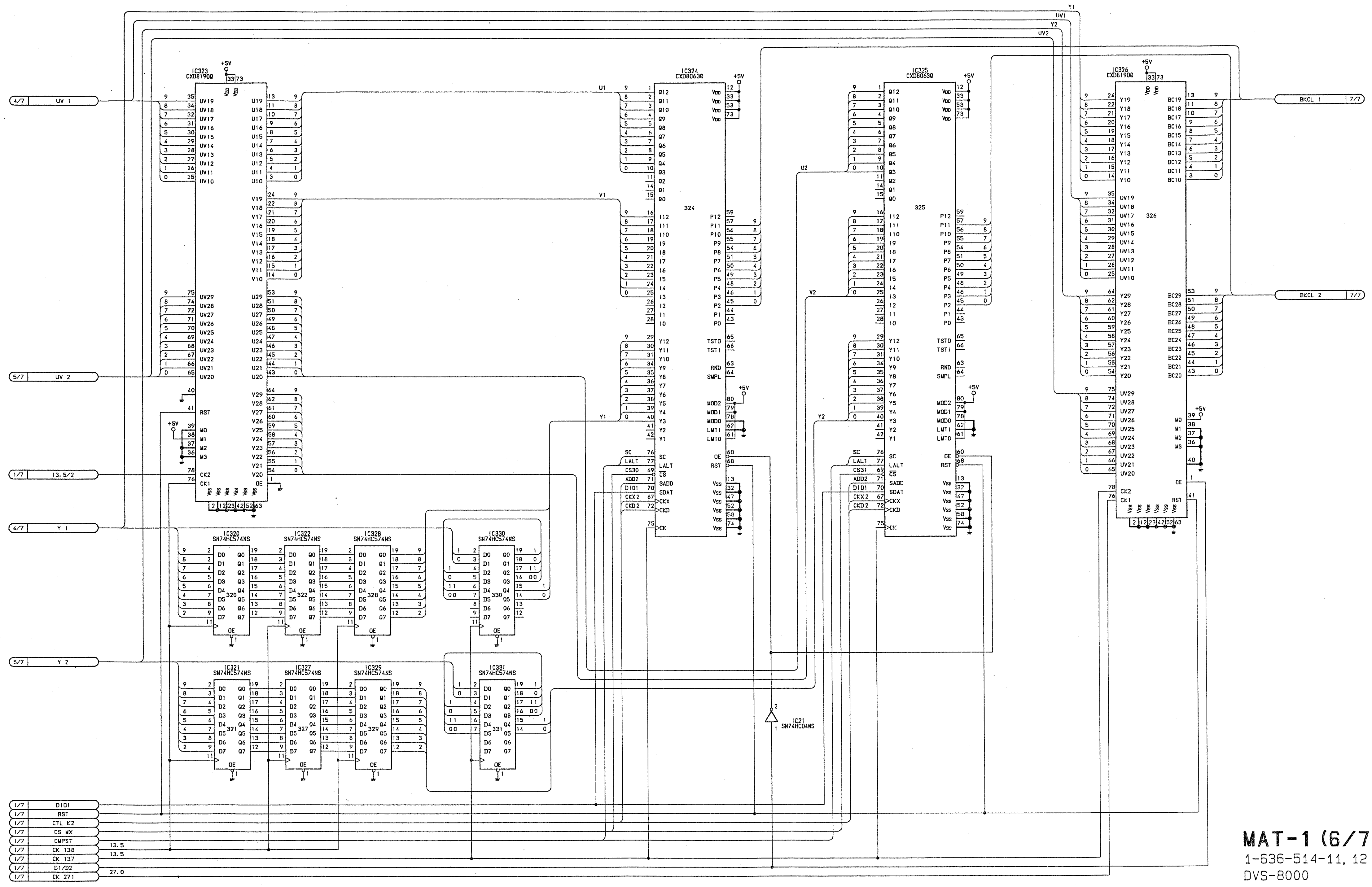
DVS-8000

A | B | C | D | E | F | G | H

MAT-1 (6/7) MATTE GENERATOR BOARD

S/N: 10001 through 10060

1
2
3
4
5

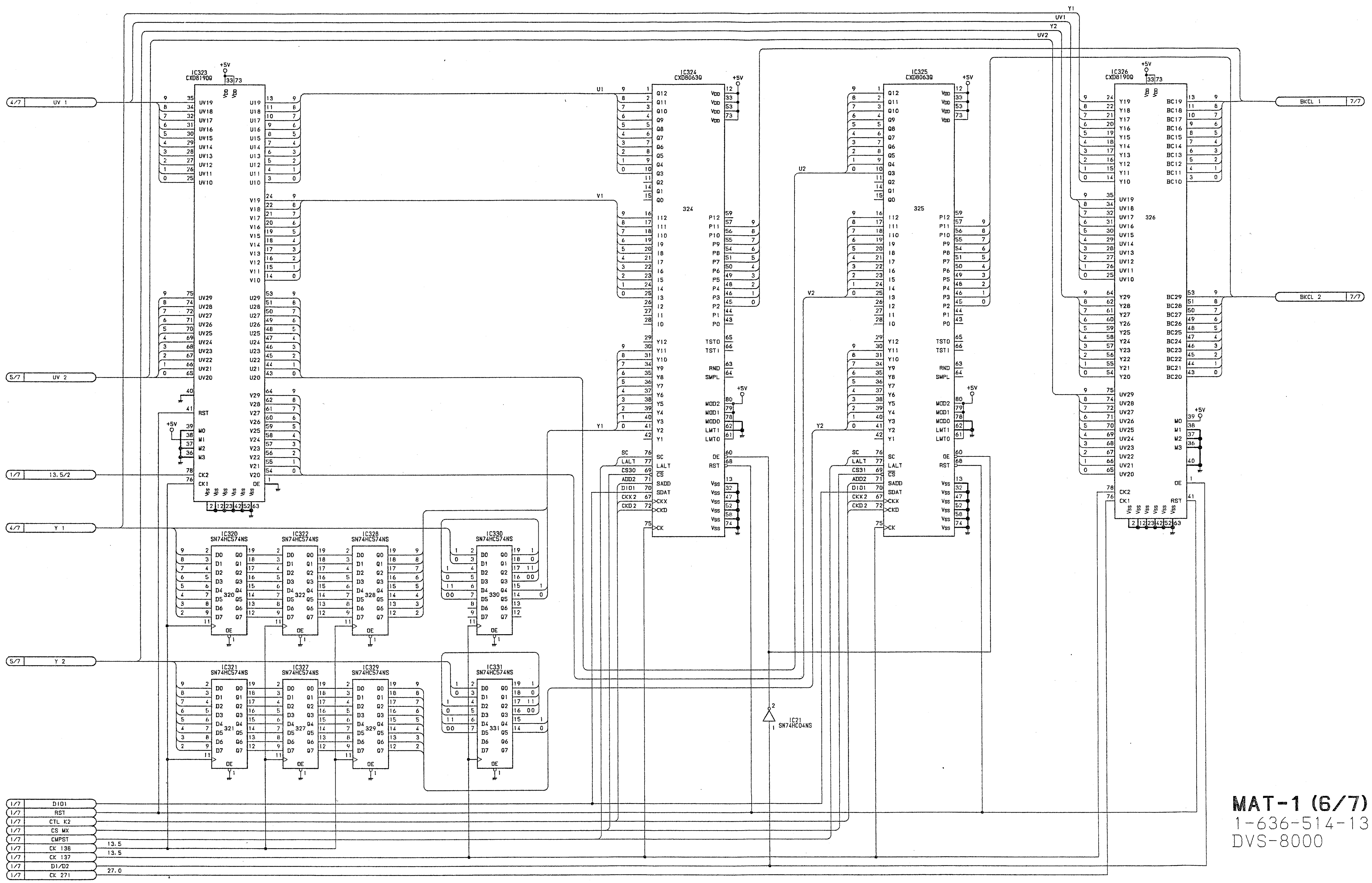

IC323 CXD8190Q
IC324 CXD8063Q
IC325 CXD8063Q
IC326 CXD8190Q
IC320 SN74HC574NS
IC322 SN74HC574NS
IC328 SN74HC574NS
IC330 SN74HC574NS
IC321 SN74HC574NS
IC327 SN74HC574NS
IC329 SN74HC574NS
IC331 SN74HC574NS
IC21 SN74HC04NS
+5V
4/7 UV 1
5/7 UV 2
1/7 13.5/2
4/7 Y 1
5/7 Y 2
BKCL 1 7/7
BKCL 2 7/7
Y1
UV1
Y2
UV2
U1
V1
U2
V2
1/7 DI01
1/7 RST
1/7 CTL K2
1/7 CS MX
1/7 CMPST
1/7 CK 138
1/7 CK 137
1/7 D1/D2
1/7 CK 271
13.5
13.5
27.0

MAT-1 (6/7)
1-636-514-11, 12
DVS-8000

A | B | C | D | E | F | G | H

MAT-1 MATTE GENERATOR BOARD

S/N; 10061 and higher

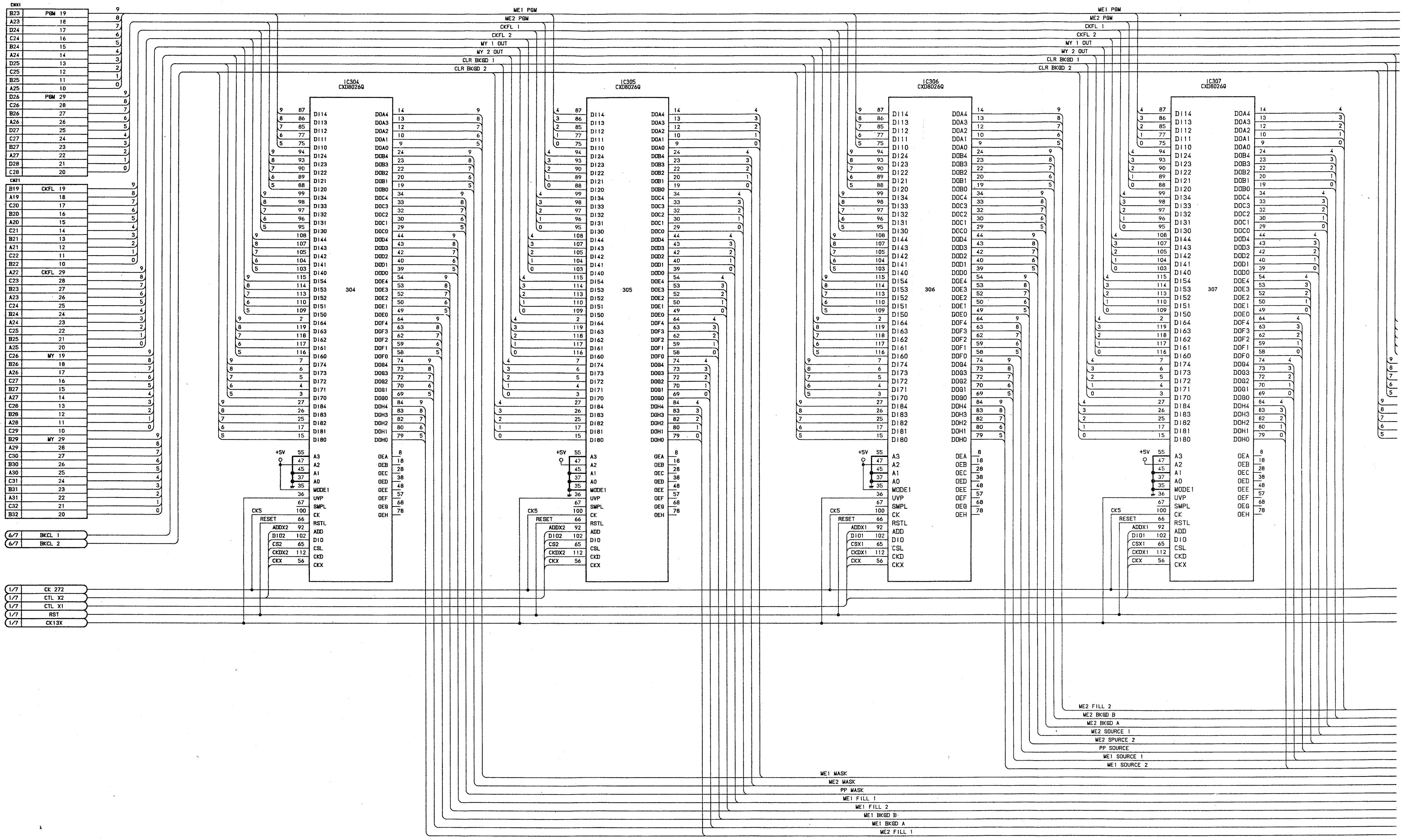

IC323
CXD8190Q
IC324
CXD8063Q
IC325
CXD8063Q
IC326
CXD8190Q
IC320
SN74HC574NS
IC322
SN74HC574NS
IC328
SN74HC574NS
IC330
SN74HC574NS
IC321
SN74HC574NS
IC327
SN74HC574NS
IC329
SN74HC574NS
IC331
SN74HC574NS
IC21
SN74HC04NS
+5V
4/7 UV 1
5/7 UV 2
1/7 13.5/2
4/7 Y 1
5/7 Y 2
1/7 DIO1
1/7 RST
1/7 CTL K2
1/7 CS MX
1/7 CMPST
1/7 CK 136
1/7 CK 137
1/7 D1/D2
1/7 CK 271
13.5
13.5
27.0
BKCL 1 7/7
BKCL 2 7/7
Y1
UV1
Y2
UV2
U1
V1
U2
V2
SC
LALT
CS30
CS31
ADD2
DIO1
CKX2
CKD2
TSTO
TST1
RND
SMPL
MOD2
MOD1
MOD0
LMT1
LMT0
OE
RST
CK2
CK1

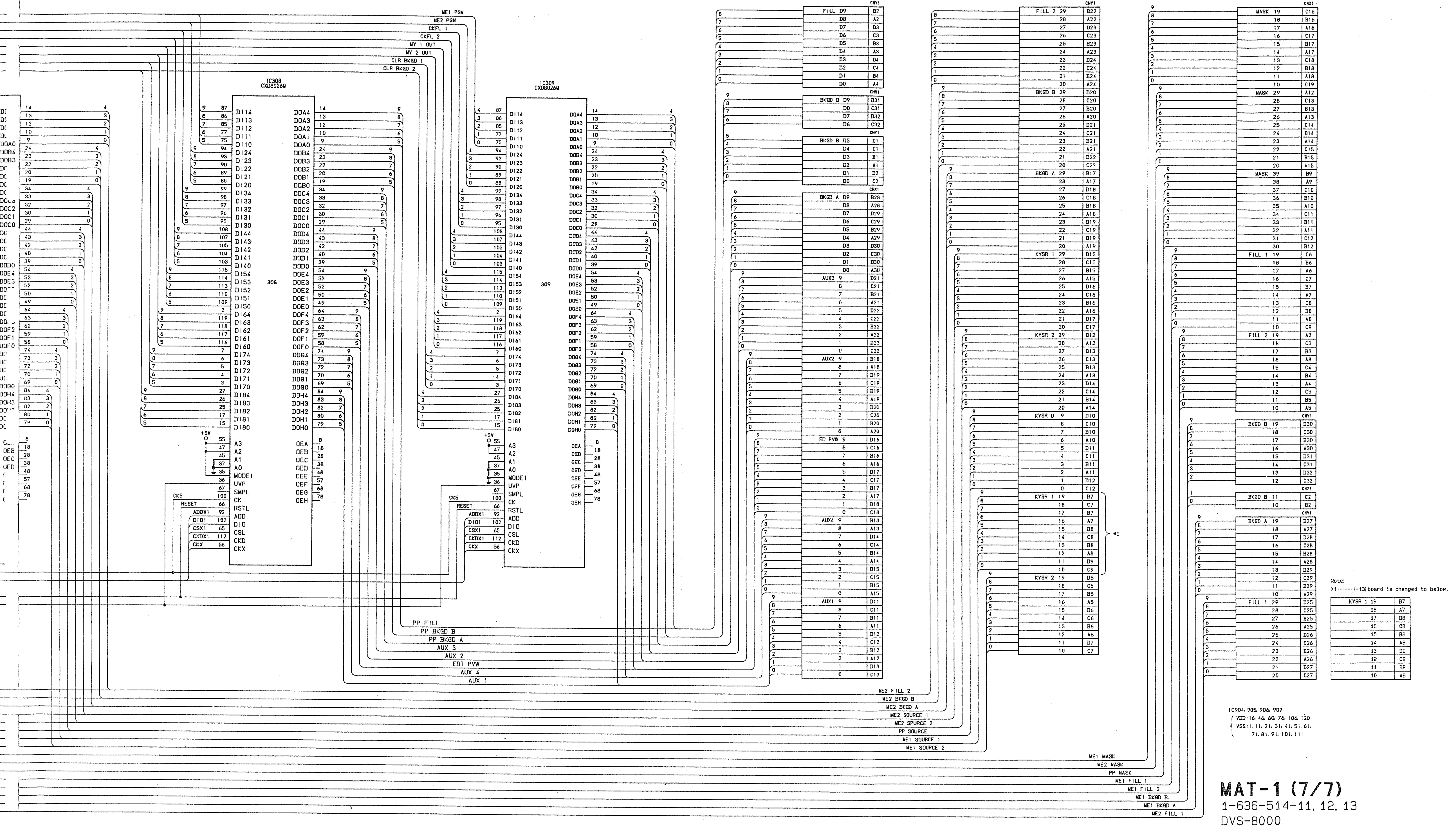
MAT-1 (6/7)
1-636-514-13
DVS-8000

1
2
3
4
5

A | B | C | D | E | F | G | H

MAT-1 (7/7) MATTE GENERATOR BOARD

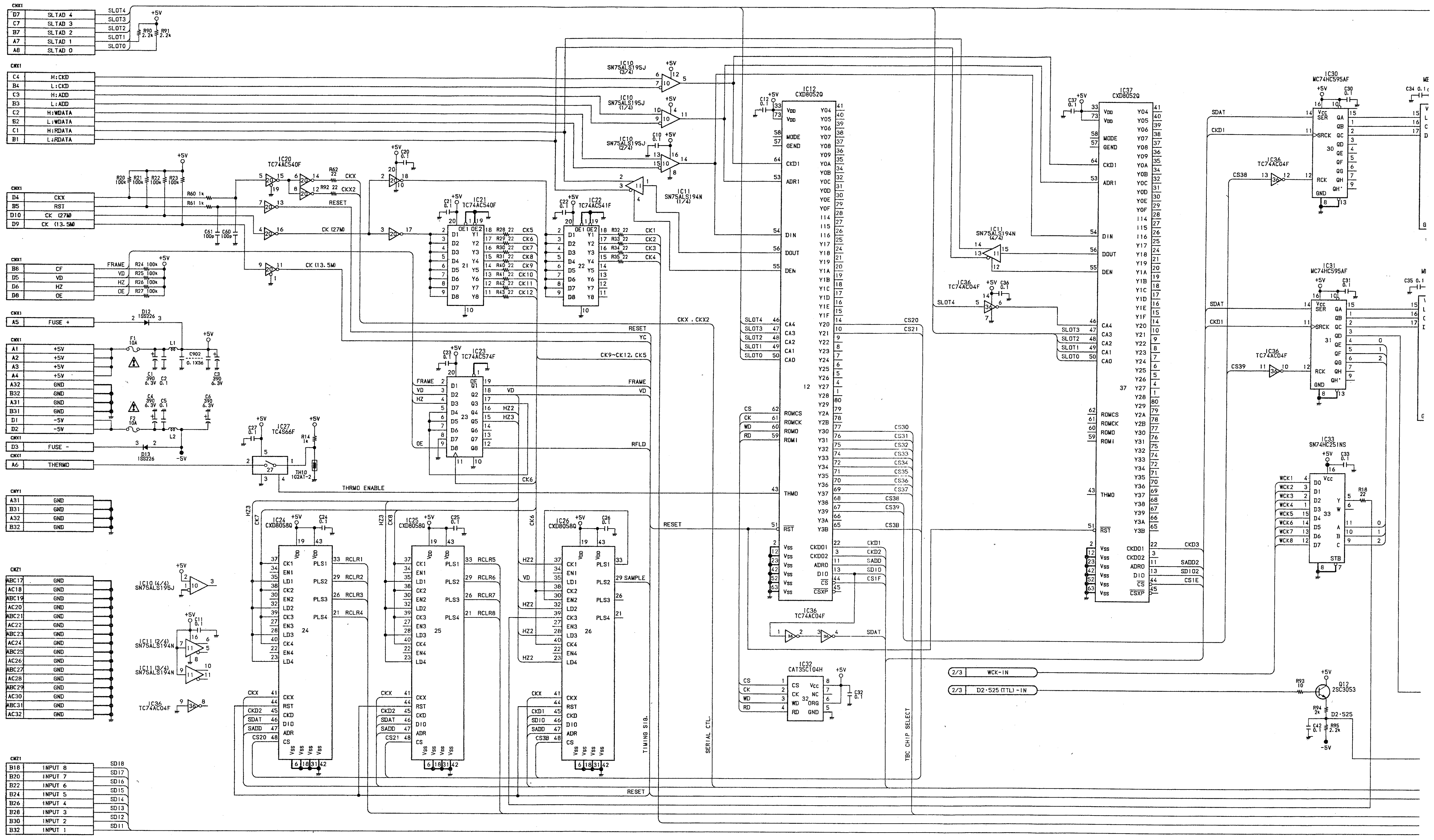

CNX1
PGM 19
CKFL 19
CKFL 29
MY 19
MY 29
BKCL 1
BKCL 2
CK 272
CTL X2
CTL X1
RST
CK13X
ME1 PGM
ME2 PGM
CKFL 1
CKFL 2
MY 1 OUT
MY 2 OUT
CLR BKGD 1
CLR BKGD 2
IC304 CXD8026Q
IC305 CXD8026Q
IC306 CXD8026Q
IC307 CXD8026Q
304
305
306
307
+5V
CK5
RESET
ADDX2
DI02
CS2
CKDX2
CKX
ADDX1
DI01
CSX1
CKDX1
ME2 FILL 2
ME2 BKGD B
ME2 BKGD A
ME2 SOURCE 1
ME2 SOURCE 2
PP SOURCE
ME1 SOURCE 1
ME1 SOURCE 2
ME1 MASK
ME2 MASK
PP MASK
ME1 FILL 1
ME1 FILL 2
ME1 BKGD B
ME1 BKGD A
ME2 FILL 1


ME1 PGM
ME2 PGM
CKFL 1
CKFL 2
MY 1 OUT
MY 2 OUT
CLR BKGD 1
CLR BKGD 2
IC308
CXD8026Q
308
IC309
CXD8026Q
309
+5V
CKS
RESET
ADDX1
DIO1
CSX1
CKDX1
CKX
PP FILL
PP BKGD B
PP BKGD A
AUX 3
AUX 2
EDT PVW
AUX 4
AUX 1
FILL D9
BKGD B D9
BKGD B D5
BKGD A D9
AUX3 9
AUX2 9
ED PVW 9
AUX4 9
AUX1 9
FILL 2 29
BKGD B 29
BKGD A 29
KYSR 1 29
KYSR 2 29
KYSR D 9
KYSR 1 19
KYSR 2 19
*1
MASK 19
MASK 29
MASK 39
FILL 1 19
FILL 2 19
BKGD B 19
BKGD B 11
BKGD A 19
FILL 1 29
CN11
CN21
ME2 FILL 2
ME2 BKGD B
ME2 BKGD A
ME2 SOURCE 1
ME2 SPURCE 2
PP SOURCE
ME1 SOURCE 1
ME1 SOURCE 2
ME1 MASK
ME2 MASK
PP MASK
ME1 FILL 1
ME1 FILL 2
ME1 BKGD B
ME1 BKGD A
ME2 FILL 1
Note:
*1------(-13)board is changed to below.
KYSR 1 19 B7
18 A7
17 D8
16 C8
15 B8
14 A8
13 D9
12 C9
11 B9
10 A9
IC904, 905, 906, 907
VDD:16, 46, 60, 76, 106, 120
VSS:1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111

MAT-1 (7/7)
1-636-514-11, 12, 13
DVS-8000

XPT-1 (1/3) DIGITAL INPUT BOARD

S/N; 10001 through 10030


CN1
SLTAD 4
SLTAD 3
SLTAD 2
SLTAD 1
SLTAD 0
H:CKD
L:CKD
H:ADD
L:ADD
H:WDATA
L:WDATA
H:RDATA
L:RDATA
CKX
RST
CK (27M)
CK (13.5M)
CF
VD
HZ
OE
FUSE +
FUSE -
THERMO
INPUT 8
INPUT 7
INPUT 6
INPUT 5
INPUT 4
INPUT 3
INPUT 2
INPUT 1
IC10 SN75ALS195J
IC11 SN75ALS194N
IC12 CXD8052Q
IC37 CXD8052Q
IC20 TC74AC540F
IC21 TC74AC540F
IC22 TC74AC541F
IC23 TC74AC574F
IC24 CXD8058Q
IC25 CXD8058Q
IC26 CXD8058Q
IC27 TC4S66F
IC30 MC74HC595AF
IC31 MC74HC595AF
IC32 CAT35C104H
IC33 SN74HC251NS
IC36 TC74AC04F
Q12 2SC3053
TH10 102AT-2
D12 1SS226
D13 1SS226
THRMO ENABLE
TIMING SIG.
SERIAL CTL.
TBC CHIP SELECT
RESET
2/3 WCK-IN
2/3 D2·525 (TTL)-IN
D2·525

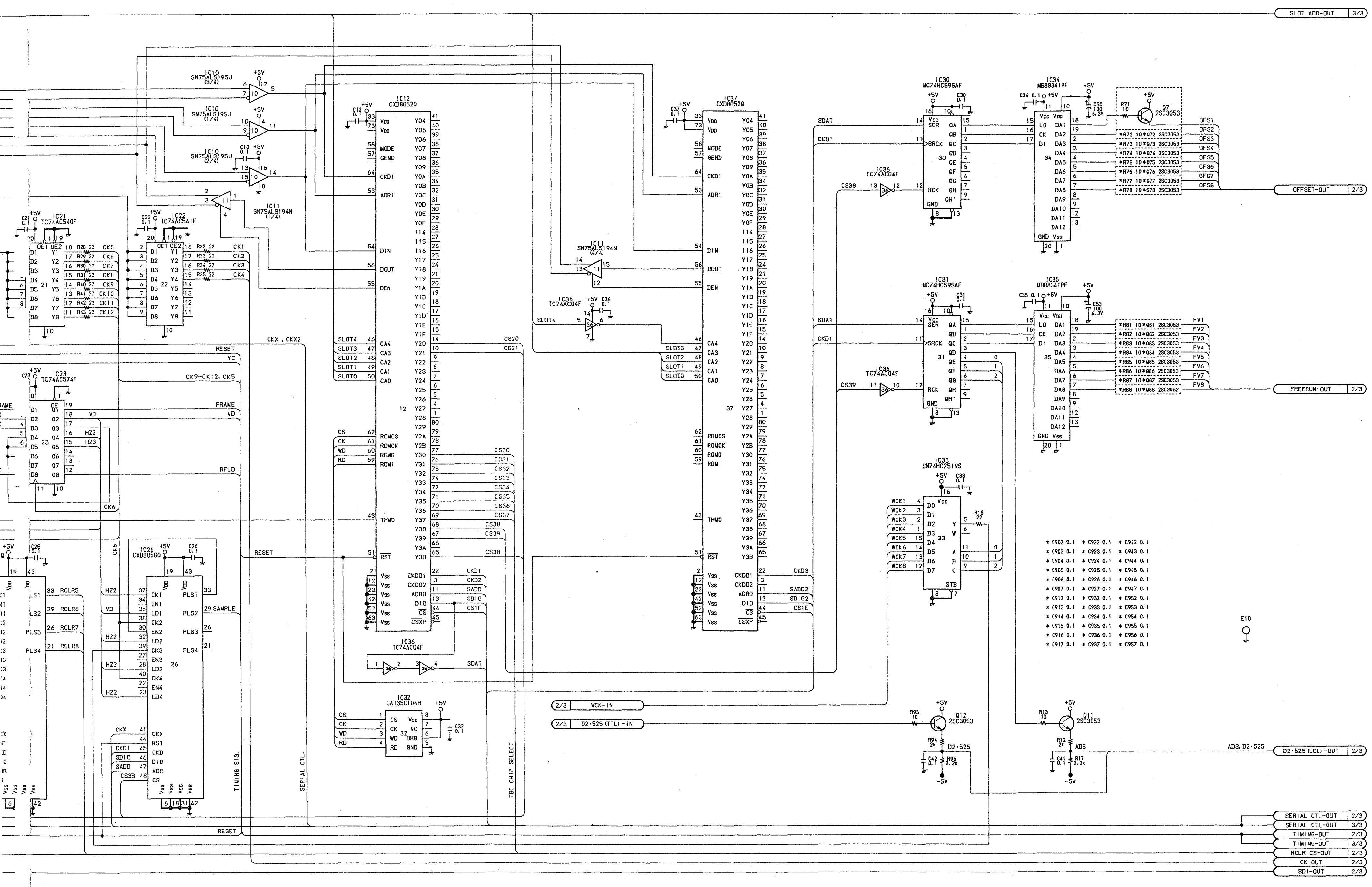
2

3

4

5

A | B | C | D | E | F | G | H |


SLOT ADD-OUT 3/3
IC10 SN75ALS195J (3/4)
IC10 SN75ALS195J (1/4)
IC10 SN75ALS195J (2/4)
IC11 SN75ALS194N (1/4)
IC12 CXD8052Q
IC37 CXD8052Q
IC11 SN75ALS194N (4/4)
IC36 TC74AC04F
IC21 TC74AC540F
IC22 TC74AC541F
IC23 TC74AC574F
IC26 CXD8058Q
IC32 CAT35C104H
IC30 MC74HC595AF
IC31 MC74HC595AF
IC34 MB88341PF
IC35 MB88341PF
IC33 SN74HC251NS
Q71 2SC3053
Q11 2SC3053
Q12 2SC3053
SDAT
CKD1
CS38
CS39
SLOT4
OFFSET-OUT 2/3
FREERUN-OUT 2/3
2/3 WCK-IN
2/3 D2-525 (TTL)-IN
ADS, D2-525
D2-525 (ECL)-OUT 2/3
SERIAL CTL-OUT 2/3
SERIAL CTL-OUT 3/3
TIMING-OUT 2/3
TIMING-OUT 3/3
RCLR CS-OUT 2/3
CK-OUT 2/3
SDI-OUT 2/3
RESET
TIMING SIG.
SERIAL CTL.
TBC CHIP SELECT
E10
-5V
+5V

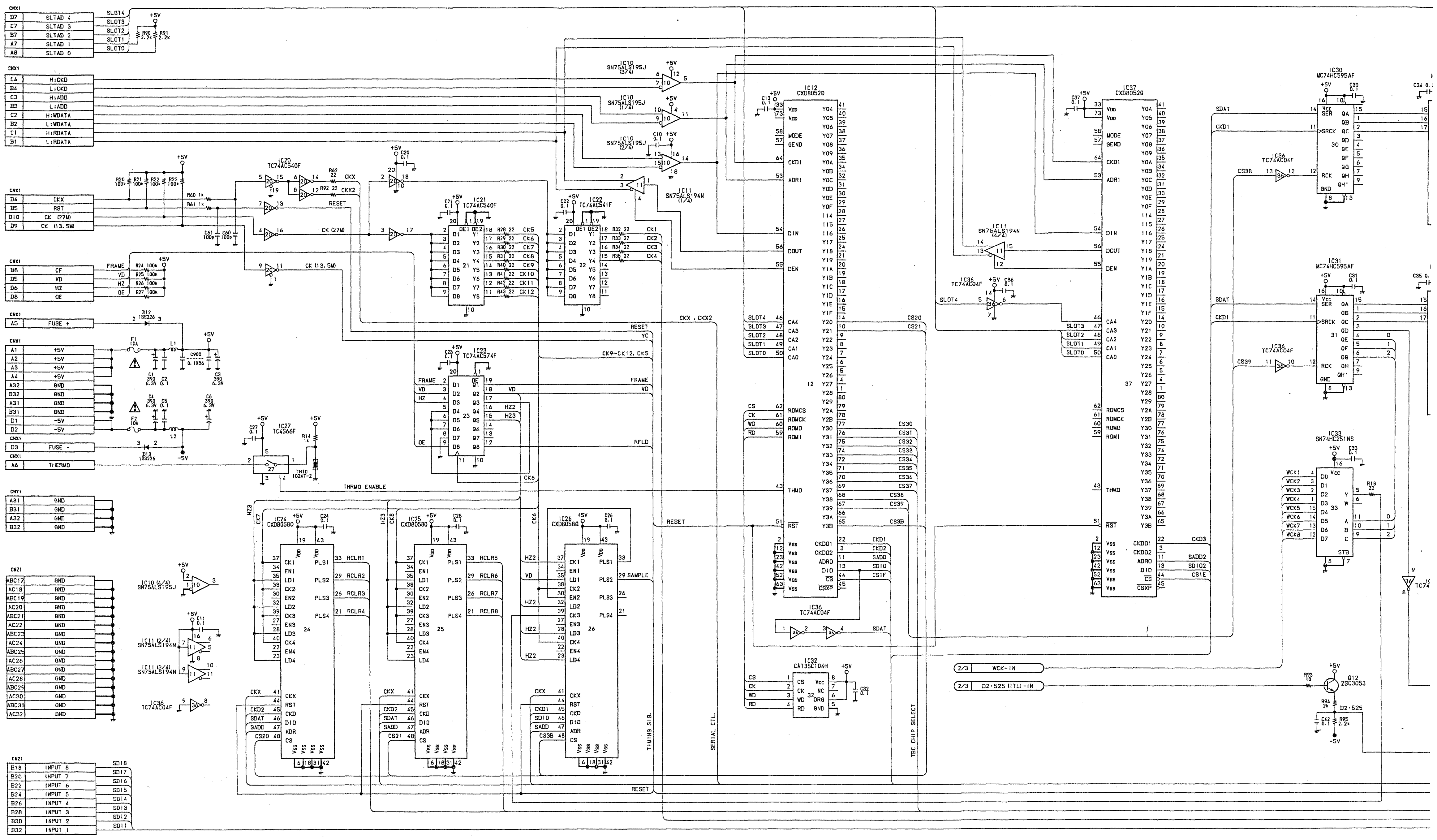
XPT-1 (1/3)

1-636-515-11
DVS-8000
BKDS-8020

XPT-1 (1/3) DIGITAL INPUT BOARD

S/N; 10031 through 10060

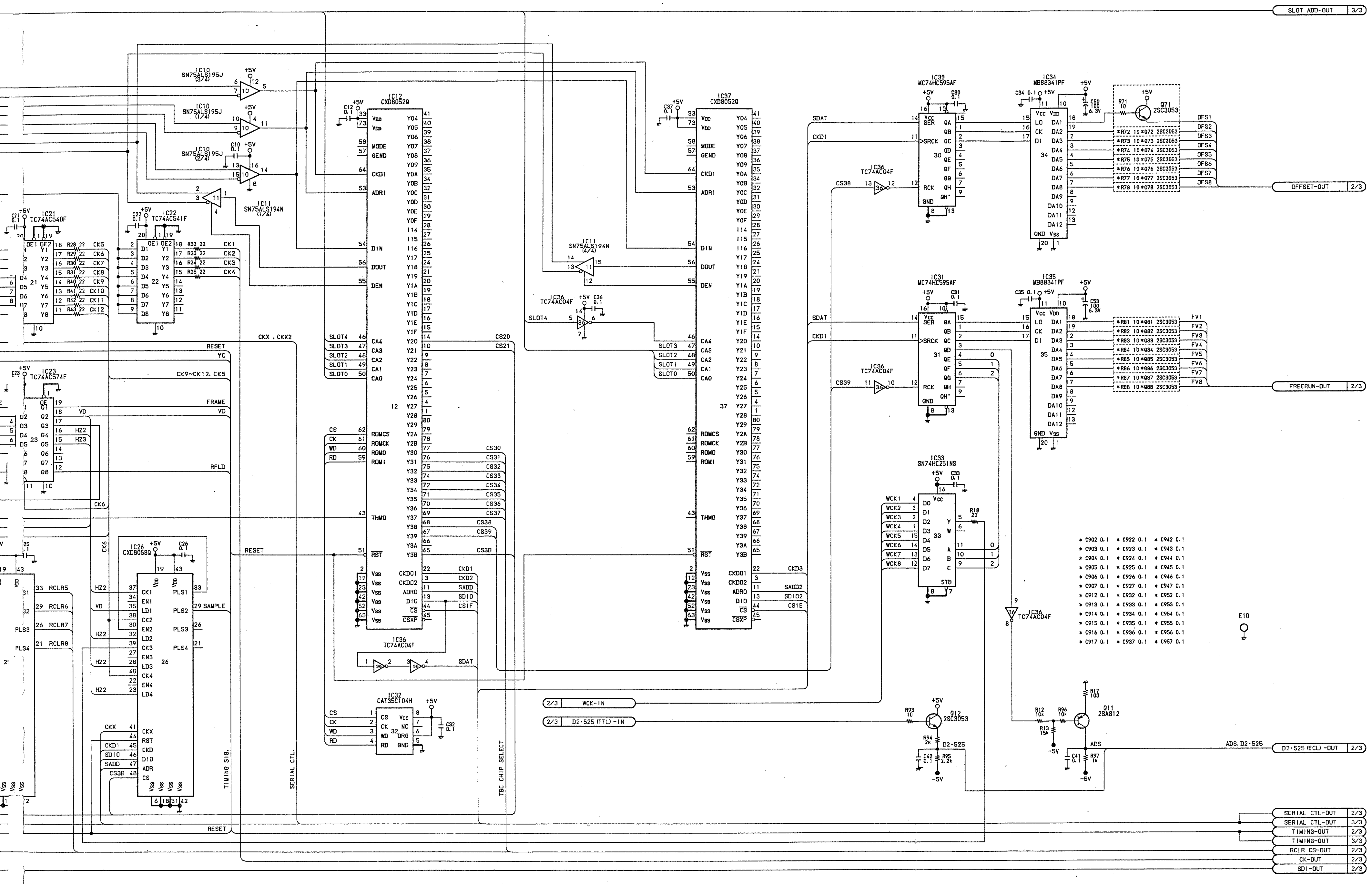
3


CN1
SLTAD 4
SLTAD 3
SLTAD 2
SLTAD 1
SLTAD 0
H:CKD
L:CKD
H:ADD
L:ADD
H:WDATA
L:WDATA
H:RDATA
L:RDATA
CKX
RST
CK (27M)
CK (13.5M)
CF
VD
HZ
OE
FUSE +
+5V
GND
-5V
FUSE -
THERMO
INPUT 8
INPUT 7
INPUT 6
INPUT 5
INPUT 4
INPUT 3
INPUT 2
INPUT 1
SD18
SD17
SD16
SD15
SD14
SD13
SD12
SD11
IC10 SN75ALS195J
IC11 SN75ALS194N
IC12 CXD8052Q
IC37 CXD8052Q
IC20 TC74AC540F
IC21 TC74AC540F
IC22 TC74AC541F
IC23 TC74AC574F
IC24 CXD8058Q
IC25 CXD8058Q
IC26 CXD8058Q
IC27 TC4S66F
IC30 MC74HC595AF
IC31 MC74HC595AF
IC32 CAT35C104H
IC33 SN74HC251NS
IC36 TC74AC04F
Q12 2SC3053
THRMO ENABLE
RESET
CKX, CKX2
CK9-CK12, CK5
FRAME
RFLD
TIMING SIG.
SERIAL CTL.
TBC CHIP SELECT
SDAT
CKD1
CS38
CS39
WCK-IN
D2-S25 (TTL)-IN
2/3

9-306 (b)

9-307 (b)

A | B | C | D | E | F | G | H

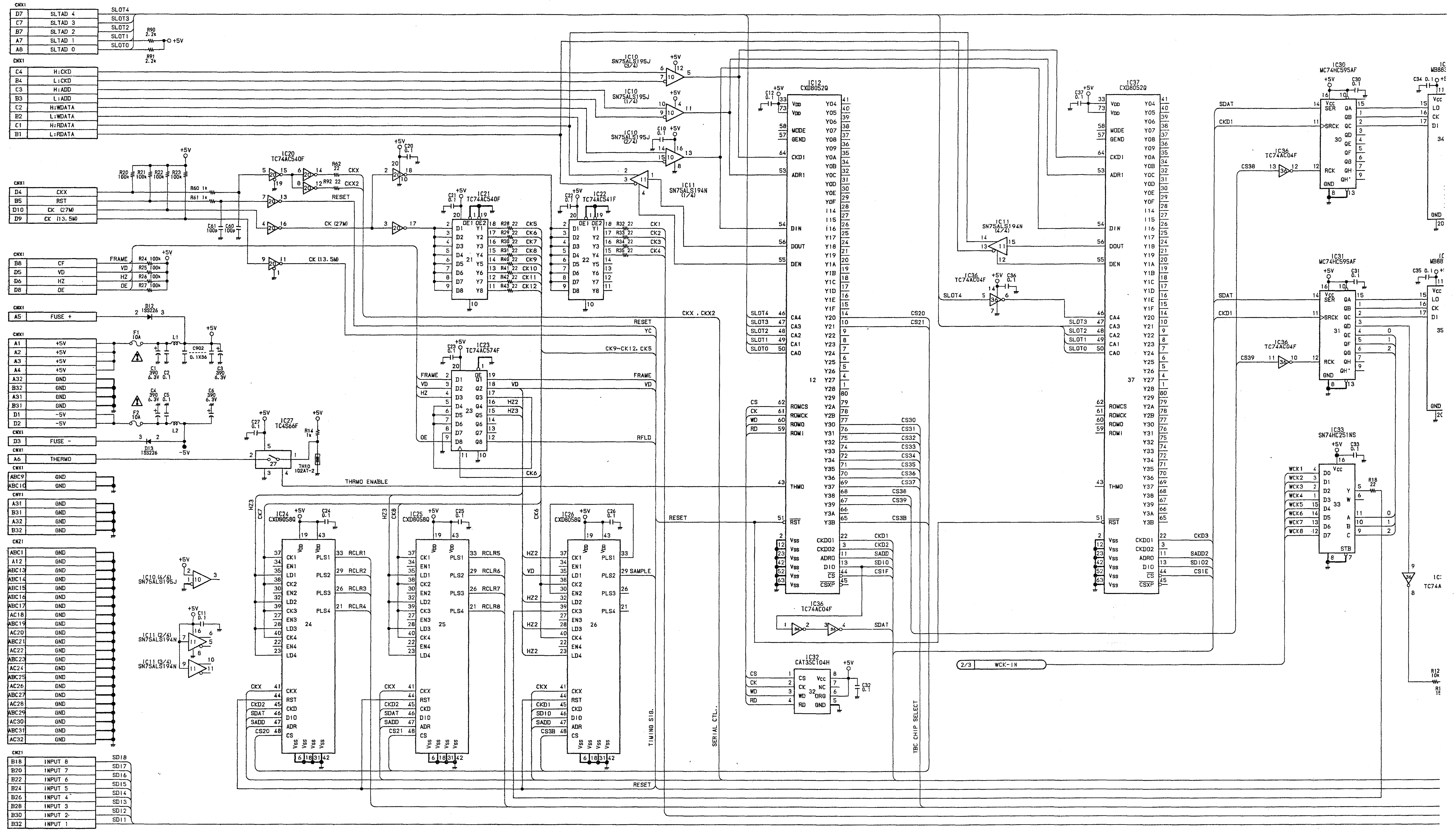

SLOT ADD-OUT 3/3
IC10 SN75ALS195J (3/4)
IC10 SN75ALS195J (1/4)
IC10 SN75ALS195J (2/4)
IC11 SN75ALS194N (1/4)
IC11 SN75ALS194N (2/4)
IC21 TC74AC540F
IC22 TC74AC541F
IC23 TC74AC574F
IC12 CXD8052Q
IC37 CXD8052Q
IC26 CXD8058Q
IC32 CAT35C104H
IC36 TC74AC04F
IC30 MC74HC595AF
IC31 MC74HC595AF
IC33 SN74HC251NS
IC34 MB88341PF
IC35 MB88341PF
Q71 2SC3053
Q12 2SC3053
Q11 2SA812
SDAT
CKD1
CS38
CS39
SLOT4
SLOT3
SLOT2
SLOT1
SLOT0
CS20
CS21
CS30
CS31
CS32
CS33
CS34
CS35
CS36
CS37
CS38
CS39
CS3B
CKD1
CKD2
SADD
SDIO
CS1F
CKD3
SADD2
SDIO2
CS1E
RESET
YC
CKX, CKX2
CK9-CK12, CK5
FRAME
VD
RFLD
CK6
SAMPLE
HZ2
HZ3
RCLR5
RCLR6
RCLR7
RCLR8
TIMING SIG.
SERIAL CTL.
TBC CHIP SELECT
OFS1
OFS2
OFS3
OFS4
OFS5
OFS6
OFS7
OFS8
OFFSET-OUT 2/3
FV1
FV2
FV3
FV4
FV5
FV6
FV7
FV8
FREERUN-OUT 2/3
WCK1
WCK2
WCK3
WCK4
WCK5
WCK6
WCK7
WCK8
2/3 WCK-IN
2/3 D2-525 (TTL)-IN
D2-525
ADS
ADS D2-525
D2-525 (ECL)-OUT 2/3
E10
+5V
-5V
* C902 0.1 * C922 0.1 * C942 0.1
* C903 0.1 * C923 0.1 * C943 0.1
* C904 0.1 * C924 0.1 * C944 0.1
* C905 0.1 * C925 0.1 * C945 0.1
* C906 0.1 * C926 0.1 * C946 0.1
* C907 0.1 * C927 0.1 * C947 0.1
* C912 0.1 * C932 0.1 * C952 0.1
* C913 0.1 * C933 0.1 * C953 0.1
* C914 0.1 * C934 0.1 * C954 0.1
* C915 0.1 * C935 0.1 * C955 0.1
* C916 0.1 * C936 0.1 * C956 0.1
* C917 0.1 * C937 0.1 * C957 0.1
SERIAL CTL-OUT 2/3
SERIAL CTL-OUT 3/3
TIMING-OUT 2/3
TIMING-OUT 3/3
RCLR CS-OUT 2/3
CK-OUT 2/3
SDI-OUT 2/3

XPT-1 (1/3)

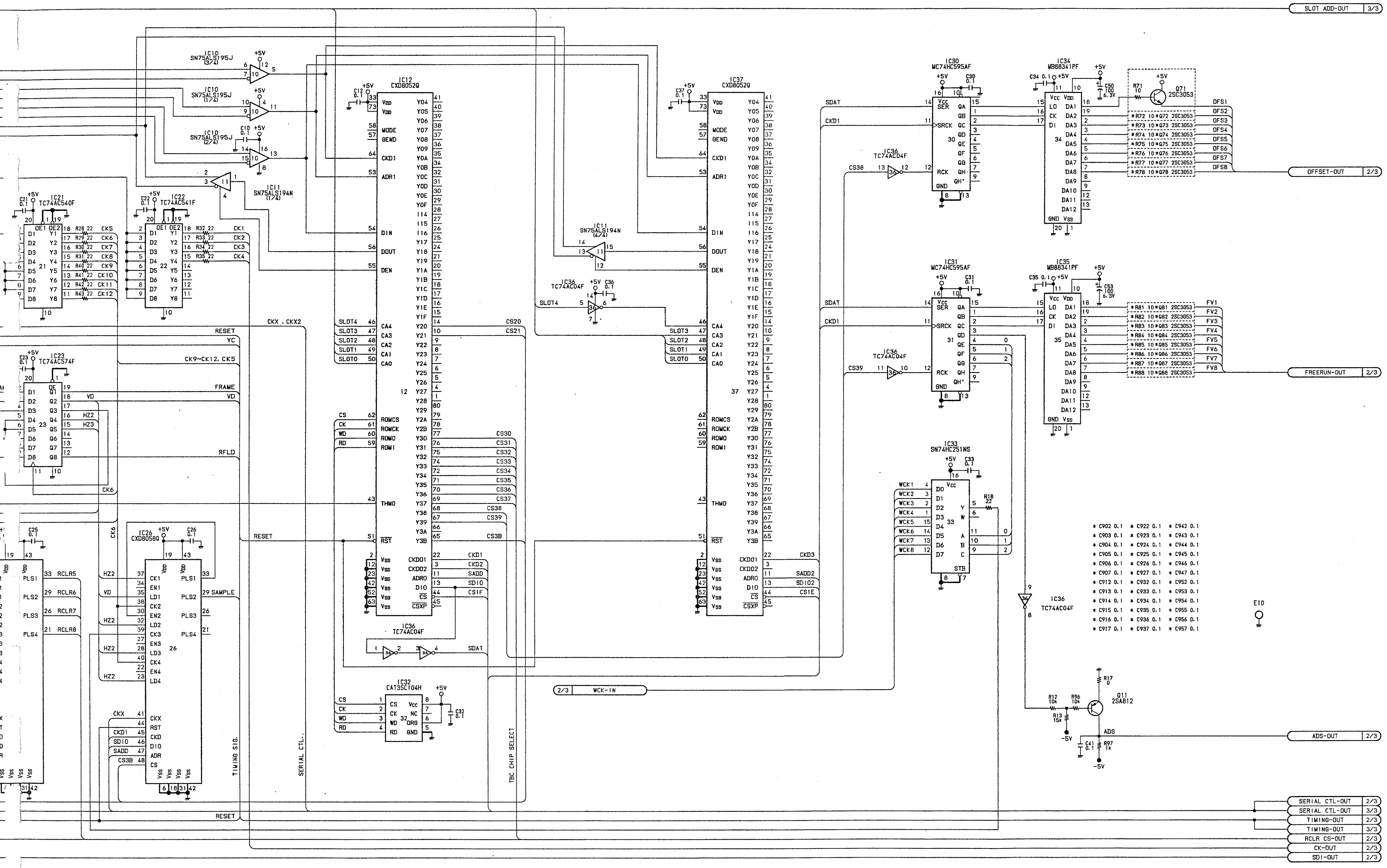
1-636-515-12
DVS-8000
BKDS-8020

XPT-1 (1/3) DIGITAL INPUT BOARD

S/N; 10061 and higher



1
2
3
4
5
SLTAD 4
SLTAD 3
SLTAD 2
SLTAD 1
SLTAD 0
H:CKD
L:CKD
H:ADD
L:ADD
H:WDATA
L:WDATA
H:RDATA
L:RDATA
CKX
RST
CK (27M)
CK (13.5M)
CF
VD
HZ
OE
FUSE +
FUSE -
THERMO
GND
+5V
-5V
INPUT 8
INPUT 7
INPUT 6
INPUT 5
INPUT 4
INPUT 3
INPUT 2
INPUT 1
IC10 SN75ALS195J
IC11 SN75ALS194N
IC12 CXD8052Q
IC20 TC74AC540F
IC21 TC74AC540F
IC22 TC74AC541F
IC23 TC74AC574F
IC24 CXD8058Q
IC25 CXD8058Q
IC26 CXD8058Q
IC27 TC4S66F
IC30 MC74HC595AF
IC31 MC74HC595AF
IC32 CAT35C104H
IC33 SN74HC251NS
IC36 TC74AC04F
IC37 CXD8052Q
THERMO ENABLE
RESET
TIMING SIG.
SERIAL CTL.
YBC CHIP SELECT
SAMPLE
SDAT
CKD1
WCK-IN

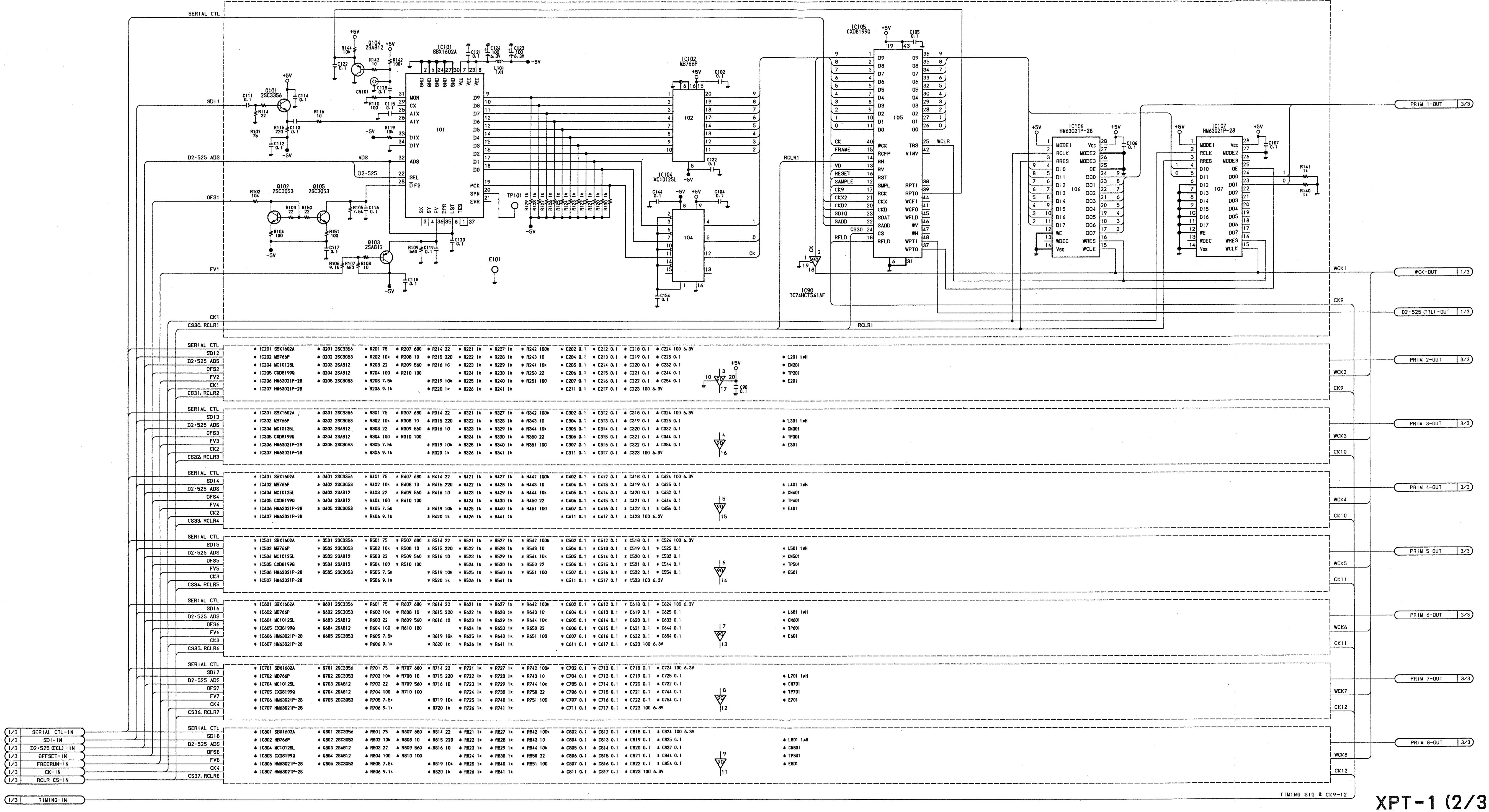

SLOT ADD-OUT 3/3
IC10 SN75ALS195J (3/4)
IC10 SN75ALS195J (1/4)
IC10 SN75ALS195J (2/4)
IC11 SN75ALS194N (1/4)
IC11 SN75ALS194N (4/4)
IC12 CXD8052Q
IC37 CXD8052Q
IC21 TC74AC540F
IC22 TC74AC541F
IC23 TC74AC574F
IC26 CXD8058Q
IC32 CAT35C104H
IC36 TC74AC04F
IC30 MC74HC595AF
IC31 MC74HC595AF
IC34 MB88341PF
IC35 MB88341PF
IC33 SN74HC251NS
Q71 2SC3053
Q11 2SA812
OFFSET-OUT 2/3
FREERUN-OUT 2/3
2/3 WCK-IN
ADS-OUT 2/3
SERIAL CTL-OUT 2/3
SERIAL CTL-OUT 3/3
TIMING-OUT 2/3
TIMING-OUT 3/3
RCLR CS-OUT 2/3
CK-OUT 2/3
SDI-OUT 2/3
TIMING SIG.
SERIAL CTL.
TBC CHIP SELECT
E10
RESET

XPT-1 (1/3)
1-636-515-13
DVS-8000
BKDS-8020

| E | F | G | H | I | J | K | L

XPT-1 (2/3) DIGITAL INPUT BOARD

S/N; 10001 through 10030


SERIAL CTL
SDI1
D2-525 ADS
OFS1
FV1
CK1
CS30, RCLR1
IC101 SBX1602A
IC102 MB766P
IC104 MC10125L
IC105 CXD8199Q
IC106 HM63021P-28
IC107 HM63021P-28
IC90 TC74HCT541AF
Q101 2SC3356
Q102 2SC3053
Q103 2SA812
Q104 2SA812
Q105 2SC3053
L101 1uH
TP101
E101
CN101
+5V
-5V
RCLR1
WCLR
WCK1
CK9
PRIM 1-OUT 3/3
WCK-OUT 1/3
D2-525 (TTL)-OUT 1/3
PRIM 2-OUT 3/3
PRIM 3-OUT 3/3
PRIM 4-OUT 3/3
PRIM 5-OUT 3/3
PRIM 6-OUT 3/3
PRIM 7-OUT 3/3
PRIM 8-OUT 3/3
1/3 SERIAL CTL-IN
1/3 SDI-IN
1/3 D2-525 (ECL)-IN
1/3 OFFSET-IN
1/3 FREERUN-IN
1/3 CK-IN
1/3 RCLR CS-IN
1/3 TIMING-IN
TIMING SIG & CK9-12
1
2
3
4
5

XPT-1 (2/3)
1-636-515-11
DVS-8000
BKDS-8020

B-SYX121-XPT1A#2

A B C D E F G H

XPT-1 (2/3) DIGITAL INPUT BOARD

S/N; 10031 through 10060

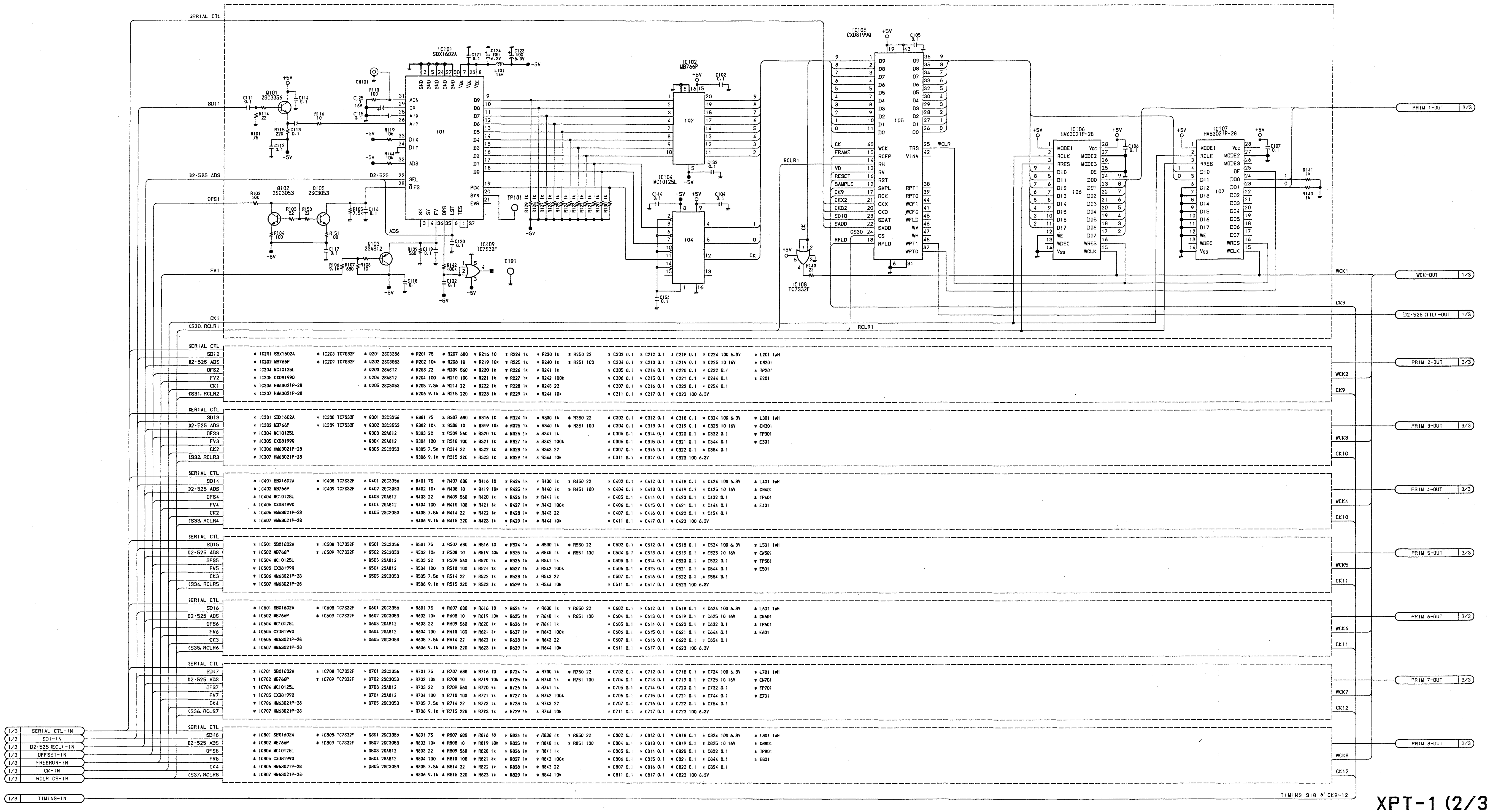
1

2

3

4

5


SERIAL CTL
SDI1
D2-525 ADS
OFS1
FV1
CK1
CS30, RCLR1
IC101 SBX1602A
IC102 MB766P
IC104 MC10125L
IC105 CXD8199Q
IC106 HM63021P-28
IC107 HM63021P-28
IC108 TC7S32F
IC109 TC7S32F
Q101 2SC3356
Q102 2SC3053
Q105 2SC3053
Q103 2SA812
TP101
E101
CK101
L101 1mH
RCLR1
WCLR
PRIM 1-OUT 3/3
WCK-OUT 1/3
D2-525 (TTL)-OUT 1/3
PRIM 2-OUT 3/3
PRIM 3-OUT 3/3
PRIM 4-OUT 3/3
PRIM 5-OUT 3/3
PRIM 6-OUT 3/3
PRIM 7-OUT 3/3
PRIM 8-OUT 3/3
WCK1
CK9
WCK2
WCK3
WCK4
WCK5
WCK6
WCK7
WCK8
CK10
CK11
CK12
1/3 SERIAL CTL-IN
1/3 SDI-IN
1/3 D2-525 (ECL)-IN
1/3 OFFSET-IN
1/3 FREERUN-IN
1/3 CK-IN
1/3 RCLR CS-IN
1/3 TIMING-IN
TIMING SIG 4' CK9-12
+5V
-5V

XPT-1 (2/3)
1-636-515-12
DVS-8000
BKDS-8020

9-311 (b)

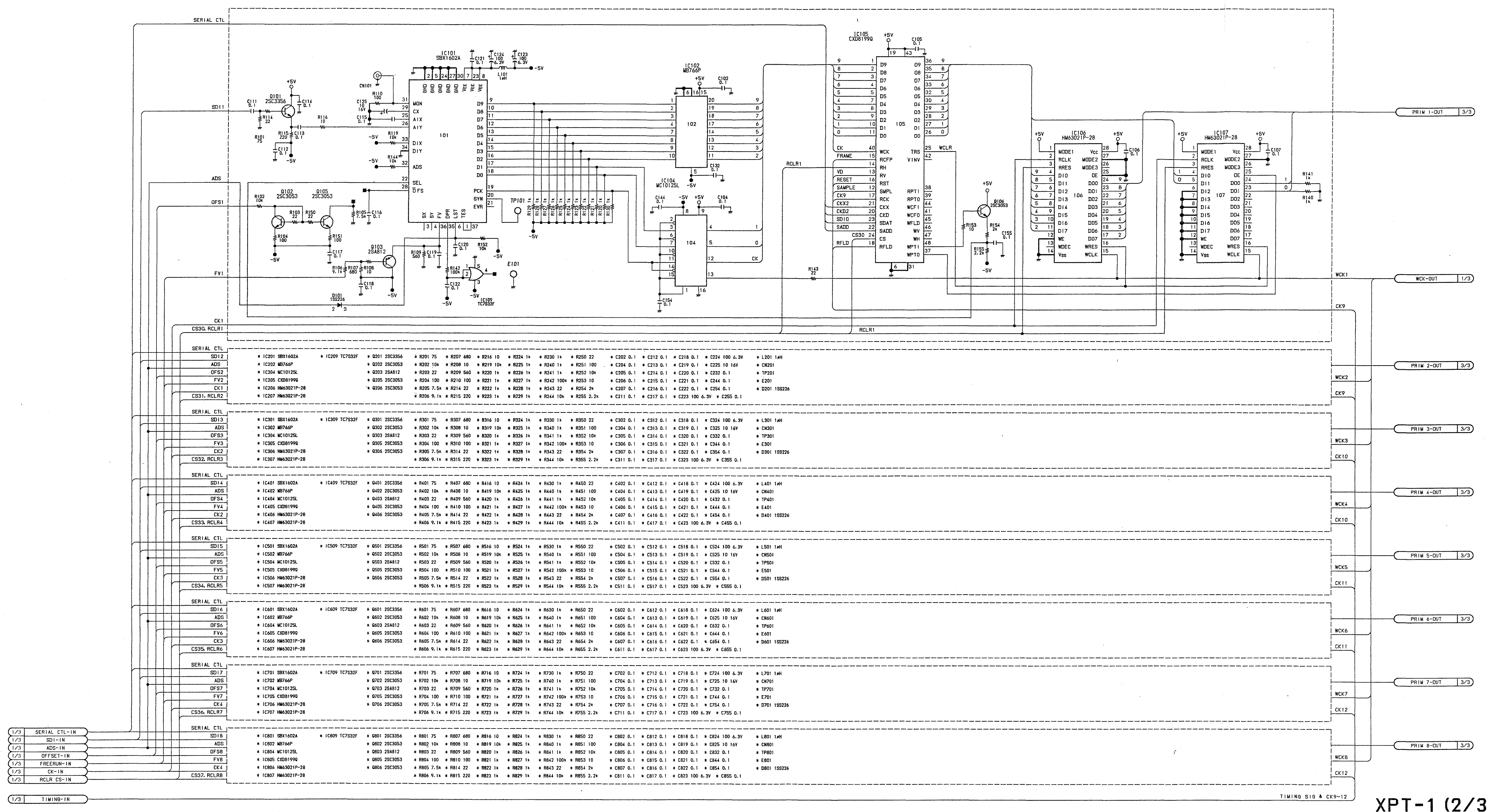
9-312 (b)

B-SYX121-XPT1A#2

A B C D E F G H

XPT-1 (2/3) DIGITAL INPUT BOARD

S/N; 10061 and higher


1
2
3
4
5
SERIAL CTL
SDI1
ADS
OFS1
FV1
CK1
CS30, RCLR1
IC101 SBX1602A
IC102 MB766P
IC104 MC10125L
IC105 CXD8199Q
IC106 HM63021P-28
IC107 HM63021P-28
IC109 TC7S32F
Q101 2SC3356
Q102 2SC3053
Q105 2SC3053
Q103 2SA812
Q106 2SC3053
D101 1SS226
CN101
TP101
E101
L101 1mH
RCLR1
WCLR
PRIM 1-OUT 3/3
WCK-OUT 1/3
WCK1
CK9
PRIM 2-OUT 3/3
PRIM 3-OUT 3/3
PRIM 4-OUT 3/3
PRIM 5-OUT 3/3
PRIM 6-OUT 3/3
PRIM 7-OUT 3/3
PRIM 8-OUT 3/3
1/3 SERIAL CTL-IN
1/3 SDI-IN
1/3 ADS-IN
1/3 OFFSET-IN
1/3 FREERUN-IN
1/3 CK-IN
1/3 RCLR CS-IN
1/3 TIMING-IN
TIMING SIG & CK9-12

XPT-1 (2/3)
1-636-515-13
DVS-8000
BKDS-8020

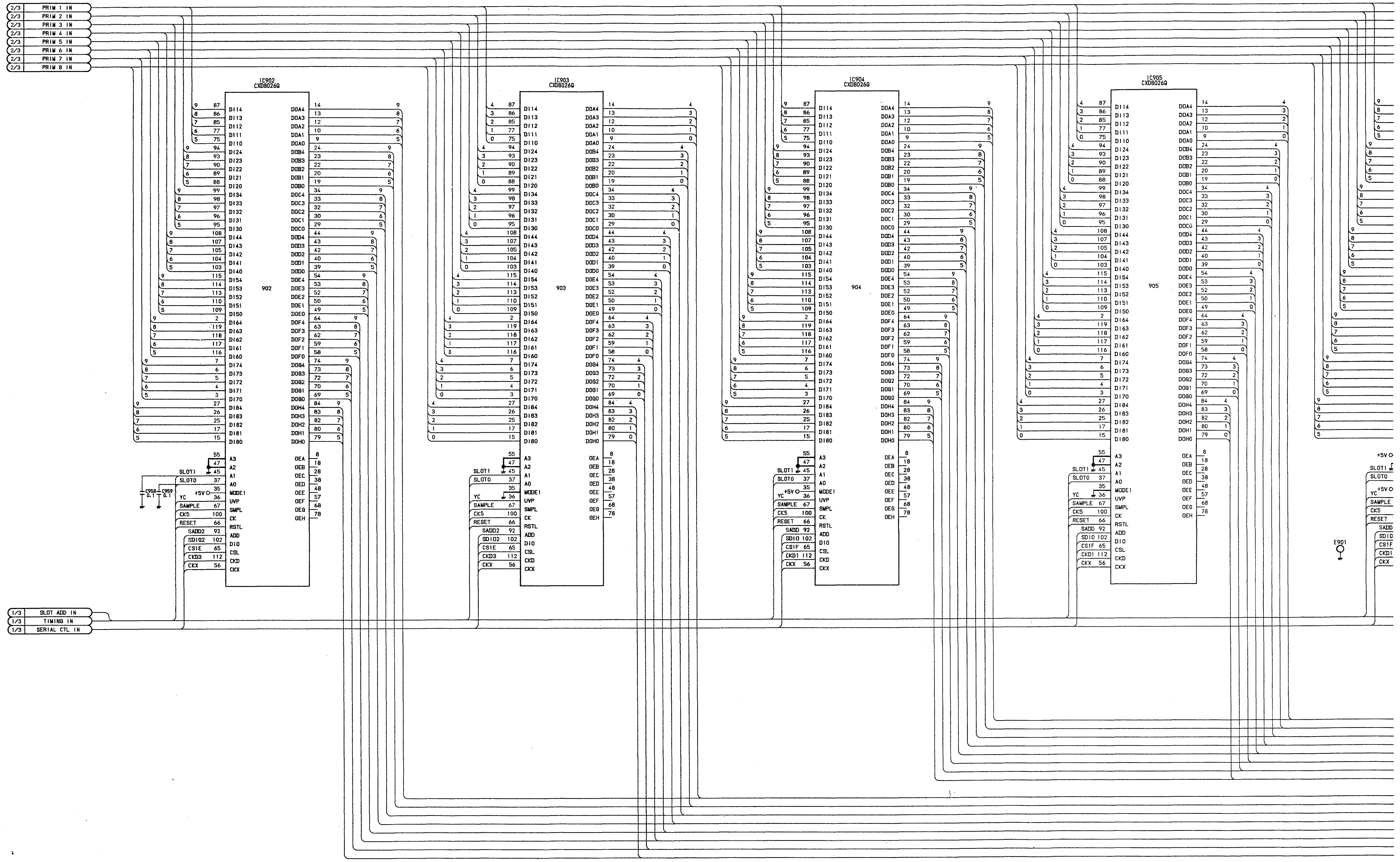
B-SYX121-XPT1A#2

9-311 (c)

9-312 (c)

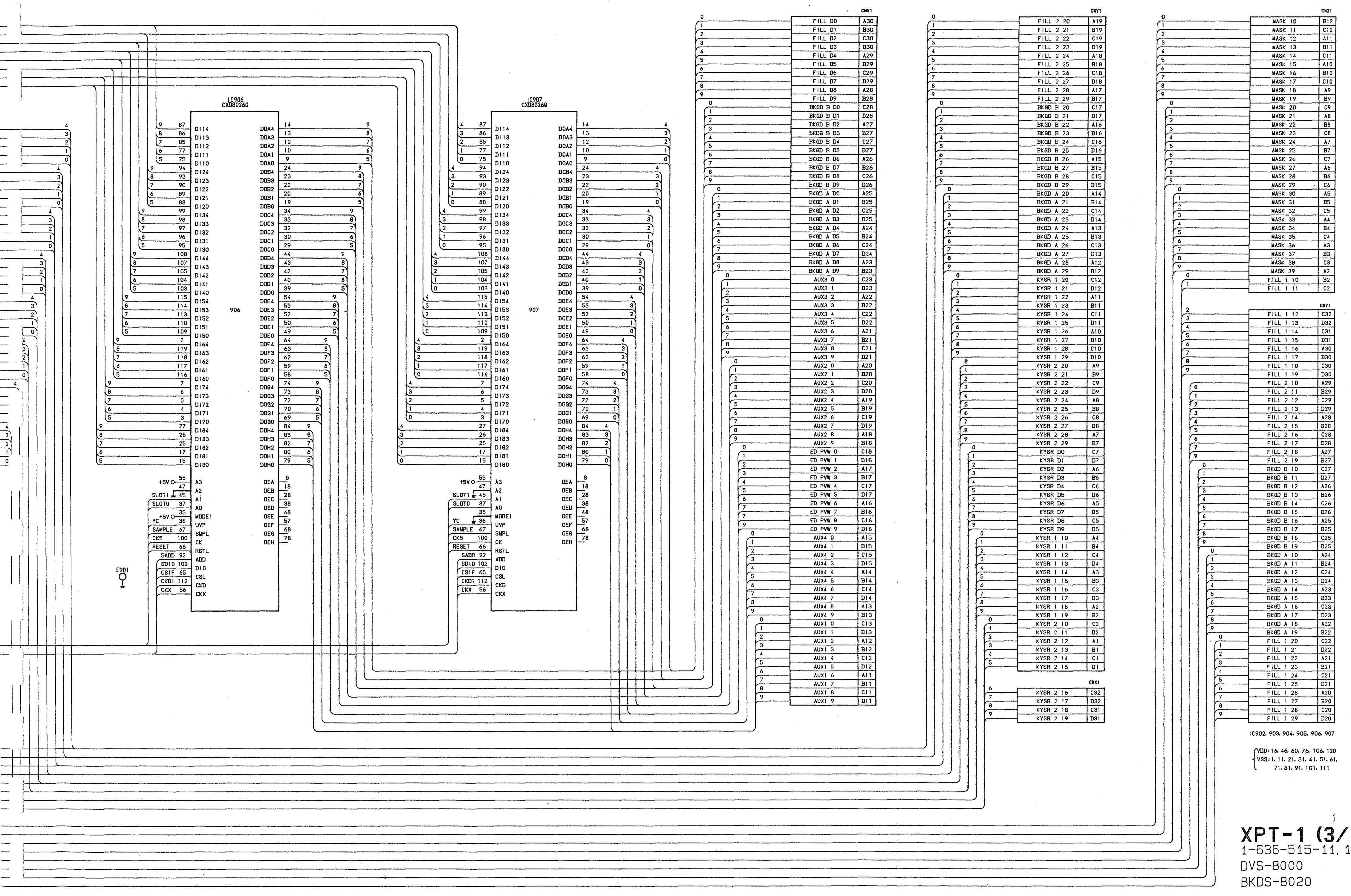
A | B | C | D | E | F | G | H

XPT-1 (3/3) DIGITAL INPUT BOARD


2/3 PRIM 1 IN
2/3 PRIM 2 IN
2/3 PRIM 3 IN
2/3 PRIM 4 IN
2/3 PRIM 5 IN
2/3 PRIM 6 IN
2/3 PRIM 7 IN
2/3 PRIM 8 IN
IC902 CXD8026Q
IC903 CXD8026Q
IC904 CXD8026Q
IC905 CXD8026Q
902
903
904
905
C958 0.1
C959 0.1
+5V
SLOT1
SLOT0
YC
SAMPLE
CK5
RESET
SADD2
SDI02
CS1E
CKD3
CKX
E901
1/3 SLOT ADD IN
1/3 TIMING IN
1/3 SERIAL CTL IN

1
2
3
4
5

A | B | C | D | E | F | G | H |

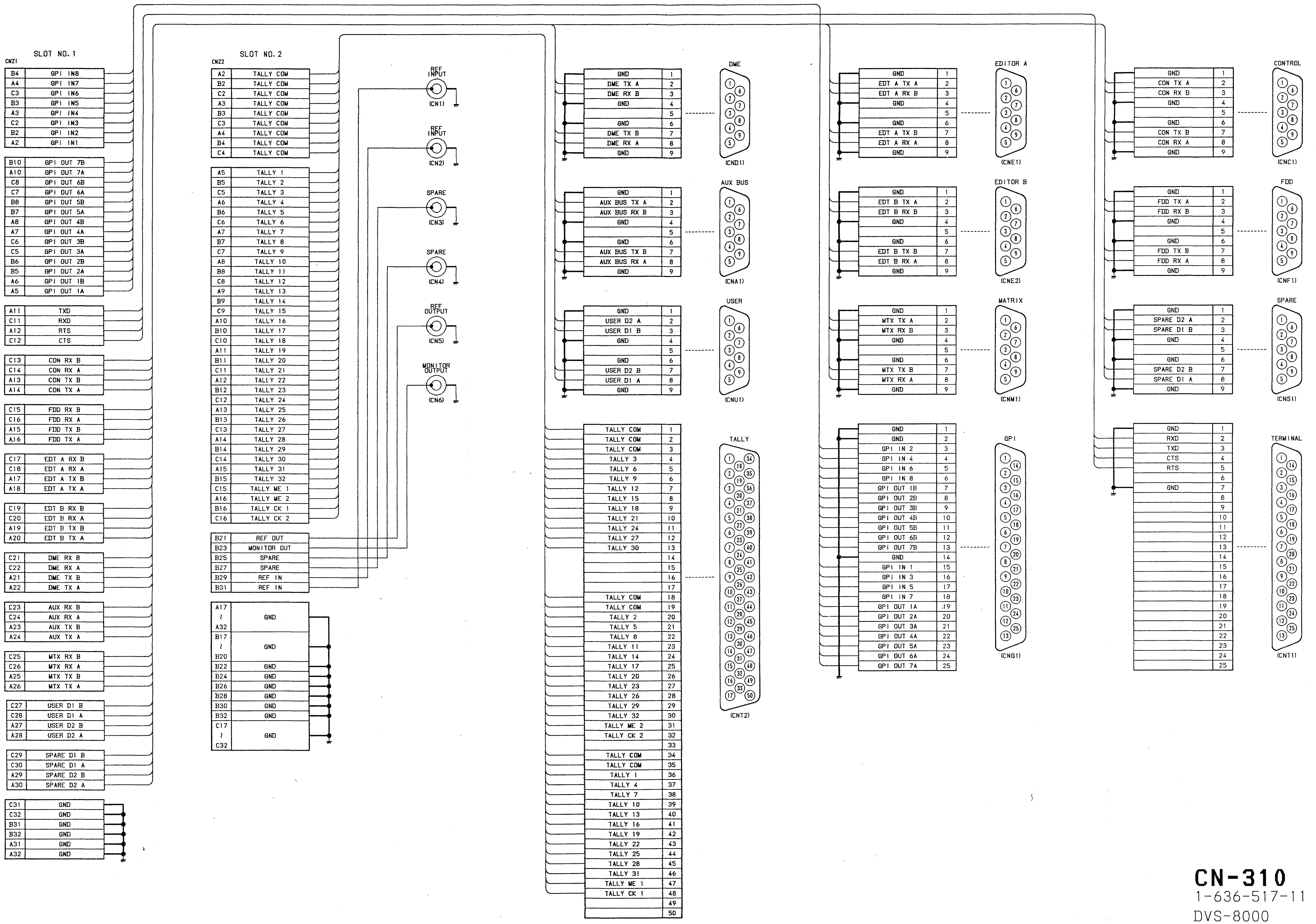

IC906
CXD8026Q
906
IC907
CXD8026Q
907
+5V
SLOT1
SLOT0
YC
SAMPLE
CKS
RESET
SADD
SD10
CS1F
CKD1
CKX
E901
CNX1
CNY1
CNZ1
FILL D0
FILL D1
FILL D2
FILL D3
FILL D4
FILL D5
FILL D6
FILL D7
FILL D8
FILL D9
BKGD B D0
BKGD B D9
BKGD A D0
BKGD A D9
AUX3 0
AUX3 9
AUX2 0
AUX2 9
ED PVW 0
ED PVW 9
AUX4 0
AUX4 9
AUX1 0
AUX1 9
FILL 2 20
FILL 2 29
BKGD B 20
BKGD B 29
BKGD A 20
BKGD A 29
KYSR 1 20
KYSR 1 29
KYSR 2 20
KYSR 2 29
KYSR D0
KYSR D9
KYSR 1 10
KYSR 1 19
KYSR 2 10
KYSR 2 19
MASK 10
MASK 39
FILL 1 10
FILL 1 29
FILL 2 10
FILL 2 19
BKGD B 10
BKGD B 19
BKGD A 10
BKGD A 19

IC902, 903, 904, 905, 906, 907

VDD:16, 46, 60, 76, 106, 120
VSS:1, 11, 21, 31, 41, 51, 61,
71, 81, 91, 101, 111

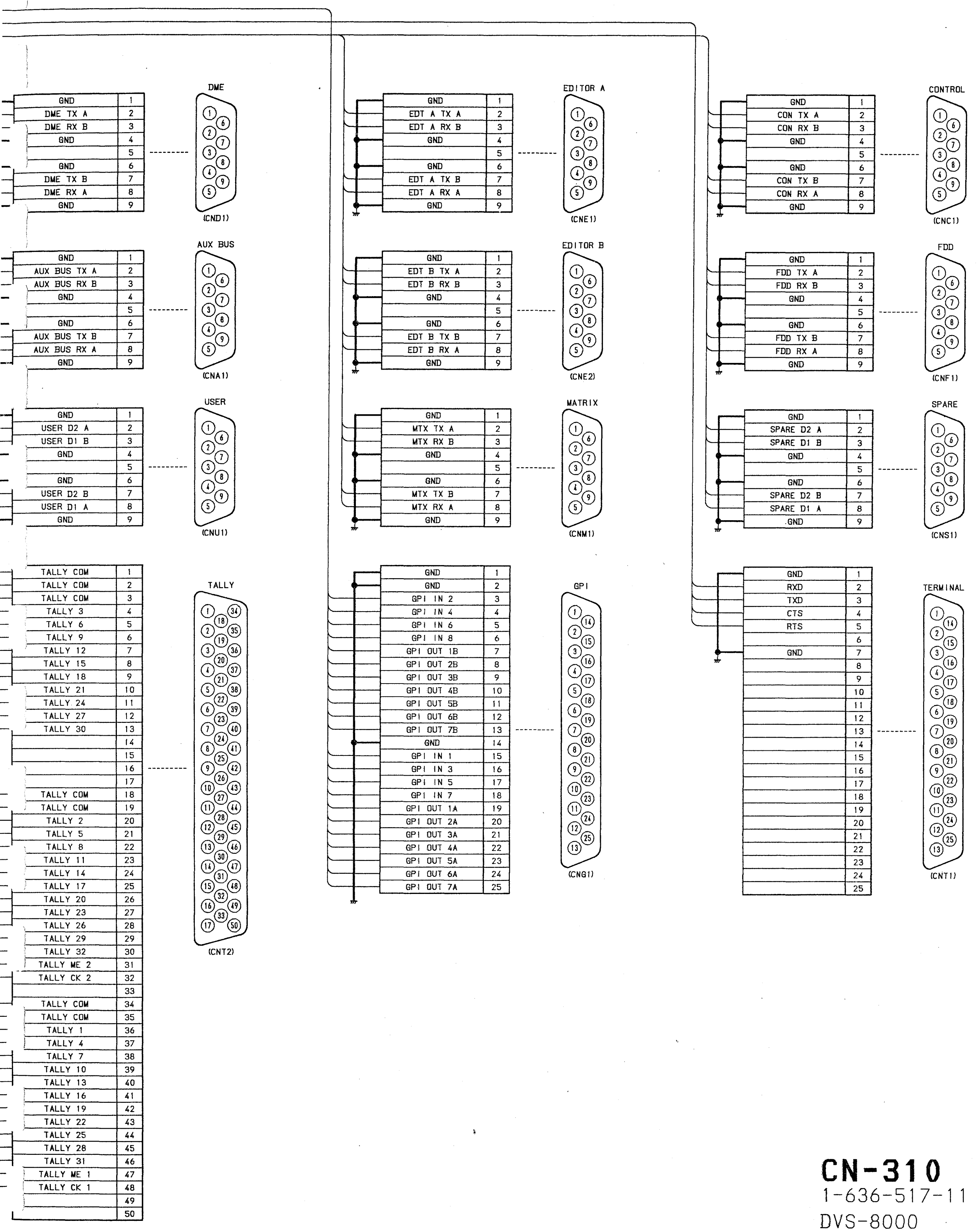
XPT-1 (3/3)
1-636-515-11, 12, 13
DVS-8000
BKDS-8020

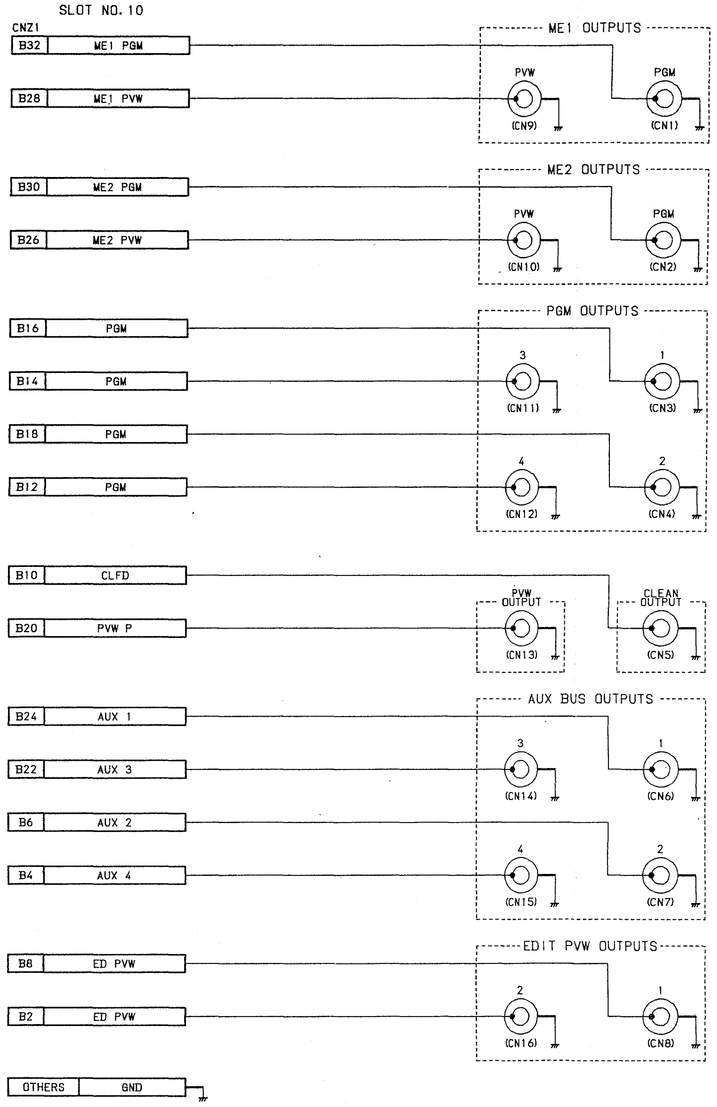
CN-310 CONTROL CONNECTOR BOARD


SLOT NO. 1
CNZ1
B4 GPI IN8
A4 GPI IN7
C3 GPI IN6
B3 GPI IN5
A3 GPI IN4
C2 GPI IN3
B2 GPI IN2
A2 GPI IN1
B10 GPI OUT 7B
A10 GPI OUT 7A
C8 GPI OUT 6B
C7 GPI OUT 6A
B8 GPI OUT 5B
B7 GPI OUT 5A
A8 GPI OUT 4B
A7 GPI OUT 4A
C6 GPI OUT 3B
C5 GPI OUT 3A
B6 GPI OUT 2B
B5 GPI OUT 2A
A6 GPI OUT 1B
A5 GPI OUT 1A
A11 TXD
C11 RXD
A12 RTS
C12 CTS
C13 CON RX B
C14 CON RX A
A13 CON TX B
A14 CON TX A
C15 FDD RX B
C16 FDD RX A
A15 FDD TX B
A16 FDD TX A
C17 EDT A RX B
C18 EDT A RX A
A17 EDT A TX B
A18 EDT A TX A
C19 EDT B RX B
C20 EDT B RX A
A19 EDT B TX B
A20 EDT B TX A
C21 DME RX B
C22 DME RX A
A21 DME TX B
A22 DME TX A
C23 AUX RX B
C24 AUX RX A
A23 AUX TX B
A24 AUX TX A
C25 MTX RX B
C26 MTX RX A
A25 MTX TX B
A26 MTX TX A
C27 USER D1 B
C28 USER D1 A
A27 USER D2 B
A28 USER D2 A
C29 SPARE D1 B
C30 SPARE D1 A
A29 SPARE D2 B
A30 SPARE D2 A
C31 GND
C32 GND
B31 GND
B32 GND
A31 GND
A32 GND
SLOT NO. 2
CNZ2
A2 TALLY COM
B2 TALLY COM
C2 TALLY COM
A3 TALLY COM
B3 TALLY COM
C3 TALLY COM
A4 TALLY COM
B4 TALLY COM
C4 TALLY COM
A5 TALLY 1
B5 TALLY 2
C5 TALLY 3
A6 TALLY 4
B6 TALLY 5
C6 TALLY 6
A7 TALLY 7
B7 TALLY 8
C7 TALLY 9
A8 TALLY 10
B8 TALLY 11
C8 TALLY 12
A9 TALLY 13
B9 TALLY 14
C9 TALLY 15
A10 TALLY 16
B10 TALLY 17
C10 TALLY 18
A11 TALLY 19
B11 TALLY 20
C11 TALLY 21
A12 TALLY 22
B12 TALLY 23
C12 TALLY 24
A13 TALLY 25
B13 TALLY 26
C13 TALLY 27
A14 TALLY 28
B14 TALLY 29
C14 TALLY 30
A15 TALLY 31
B15 TALLY 32
C15 TALLY ME 1
A16 TALLY ME 2
B16 TALLY CK 1
C16 TALLY CK 2
B21 REF OUT
B23 MONITOR OUT
B25 SPARE
B27 SPARE
B29 REF IN
B31 REF IN
A17 ~ A32 GND
B17 ~ B20 GND
B22 GND
B24 GND
B26 GND
B28 GND
B30 GND
B32 GND
C17 ~ C32 GND
REF INPUT (CN1)
REF INPUT (CN2)
SPARE (CN3)
SPARE (CN4)
REF OUTPUT (CN5)
MONITOR OUTPUT (CN6)
DME (CND1)
GND 1
DME TX A 2
DME RX B 3
GND 4
5
GND 6
DME TX B 7
DME RX A 8
GND 9
AUX BUS (CNA1)
GND 1
AUX BUS TX A 2
AUX BUS RX B 3
GND 4
5
GND 6
AUX BUS TX B 7
AUX BUS RX A 8
GND 9
USER (CNU1)
GND 1
USER D2 A 2
USER D1 B 3
GND 4
5
GND 6
USER D2 B 7
USER D1 A 8
GND 9
TALLY (CNT2)
TALLY COM 1
TALLY COM 2
TALLY COM 3
TALLY 3 4
TALLY 6 5
TALLY 9 6
TALLY 12 7
TALLY 15 8
TALLY 18 9
TALLY 21 10
TALLY 24 11
TALLY 27 12
TALLY 30 13
14
15
16
17
TALLY COM 18
TALLY COM 19
TALLY 2 20
TALLY 5 21
TALLY 8 22
TALLY 11 23
TALLY 14 24
TALLY 17 25
TALLY 20 26
TALLY 23 27
TALLY 26 28
TALLY 29 29
TALLY 32 30
TALLY ME 2 31
TALLY CK 2 32
33
TALLY COM 34
TALLY COM 35
TALLY 1 36
TALLY 4 37
TALLY 7 38
TALLY 10 39
TALLY 13 40
TALLY 16 41
TALLY 19 42
TALLY 22 43
TALLY 25 44
TALLY 28 45
TALLY 31 46
TALLY ME 1 47
TALLY CK 1 48
49
50
EDITOR A (CNE1)
GND 1
EDT A TX A 2
EDT A RX B 3
GND 4
5
GND 6
EDT A TX B 7
EDT A RX A 8
GND 9
EDITOR B (CNE2)
GND 1
EDT B TX A 2
EDT B RX B 3
GND 4
5
GND 6
EDT B TX B 7
EDT B RX A 8
GND 9
MATRIX (CNM1)
GND 1
MTX TX A 2
MTX RX B 3
GND 4
5
GND 6
MTX TX B 7
MTX RX A 8
GND 9
GPI (CNG1)
GND 1
GND 2
GPI IN 2 3
GPI IN 4 4
GPI IN 6 5
GPI IN 8 6
GPI OUT 1B 7
GPI OUT 2B 8
GPI OUT 3B 9
GPI OUT 4B 10
GPI OUT 5B 11
GPI OUT 6B 12
GPI OUT 7B 13
GND 14
GPI IN 1 15
GPI IN 3 16
GPI IN 5 17
GPI IN 7 18
GPI OUT 1A 19
GPI OUT 2A 20
GPI OUT 3A 21
GPI OUT 4A 22
GPI OUT 5A 23
GPI OUT 6A 24
GPI OUT 7A 25
CONTROL (CNC1)
GND 1
CON TX A 2
CON RX B 3
GND 4
5
GND 6
CON TX B 7
CON RX A 8
GND 9
FDD (CNF1)
GND 1
FDD TX A 2
FDD RX B 3
GND 4
5
GND 6
FDD TX B 7
FDD RX A 8
GND 9
SPARE (CNS1)
GND 1
SPARE D2 A 2
SPARE D1 B 3
GND 4
5
GND 6
SPARE D2 B 7
SPARE D1 A 8
.GND 9
TERMINAL (CNT1)
GND 1
RXD 2
TXD 3
CTS 4
RTS 5
6
GND 7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CN-310
1-636-517-11
DVS-8000

CN-311 OUTPUT CONNECTOR BOARD


DME
GND 1
DME TX A 2
DME RX B 3
GND 4
5
GND 6
DME TX B 7
DME RX A 8
GND 9
(CND1)
AUX BUS
GND 1
AUX BUS TX A 2
AUX BUS RX B 3
GND 4
5
GND 6
AUX BUS TX B 7
AUX BUS RX A 8
GND 9
(CNA1)
USER
GND 1
USER D2 A 2
USER D1 B 3
GND 4
5
GND 6
USER D2 B 7
USER D1 A 8
GND 9
(CNU1)
TALLY
TALLY COM 1
TALLY COM 2
TALLY COM 3
TALLY 3 4
TALLY 6 5
TALLY 9 6
TALLY 12 7
TALLY 15 8
TALLY 18 9
TALLY 21 10
TALLY 24 11
TALLY 27 12
TALLY 30 13
14
15
16
17
TALLY COM 18
TALLY COM 19
TALLY 2 20
TALLY 5 21
TALLY 8 22
TALLY 11 23
TALLY 14 24
TALLY 17 25
TALLY 20 26
TALLY 23 27
TALLY 26 28
TALLY 29 29
TALLY 32 30
TALLY ME 2 31
TALLY CK 2 32
33
TALLY COM 34
TALLY COM 35
TALLY 1 36
TALLY 4 37
TALLY 7 38
TALLY 10 39
TALLY 13 40
TALLY 16 41
TALLY 19 42
TALLY 22 43
TALLY 25 44
TALLY 28 45
TALLY 31 46
TALLY ME 1 47
TALLY CK 1 48
49
50
(CNT2)
EDITOR A
GND 1
EDT A TX A 2
EDT A RX B 3
GND 4
5
GND 6
EDT A TX B 7
EDT A RX A 8
GND 9
(CNE1)
EDITOR B
GND 1
EDT B TX A 2
EDT B RX B 3
GND 4
5
GND 6
EDT B TX B 7
EDT B RX A 8
GND 9
(CNE2)
MATRIX
GND 1
MTX TX A 2
MTX RX B 3
GND 4
5
GND 6
MTX TX B 7
MTX RX A 8
GND 9
(CNM1)
GPI
GND 1
GND 2
GPI IN 2 3
GPI IN 4 4
GPI IN 6 5
GPI IN 8 6
GPI OUT 1B 7
GPI OUT 2B 8
GPI OUT 3B 9
GPI OUT 4B 10
GPI OUT 5B 11
GPI OUT 6B 12
GPI OUT 7B 13
GND 14
GPI IN 1 15
GPI IN 3 16
GPI IN 5 17
GPI IN 7 18
GPI OUT 1A 19
GPI OUT 2A 20
GPI OUT 3A 21
GPI OUT 4A 22
GPI OUT 5A 23
GPI OUT 6A 24
GPI OUT 7A 25
(CNG1)
CONTROL
GND 1
CON TX A 2
CON RX B 3
GND 4
5
GND 6
CON TX B 7
CON RX A 8
GND 9
(CNC1)
FDD
GND 1
FDD TX A 2
FDD RX B 3
GND 4
5
GND 6
FDD TX B 7
FDD RX A 8
GND 9
(CNF1)
SPARE
GND 1
SPARE D2 A 2
SPARE D1 B 3
GND 4
5
GND 6
SPARE D2 B 7
SPARE D1 A 8
GND 9
(CNS1)
TERMINAL
GND 1
RXD 2
TXD 3
CTS 4
RTS 5
6
GND 7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
(CNT1)


SLOT NO. 10
CNZ1
B32 ME1 PGM
B28 ME1 PVW
ME1 OUTPUTS
PVW
PGM
(CN9)
(CN1)
B30 ME2 PGM
B26 ME2 PVW
ME2 OUTPUTS
PVW
PGM
(CN10)
(CN2)
B16 PGM
B14 PGM
B18 PGM
B12 PGM
PGM OUTPUTS
3
1
(CN11)
(CN3)
4
2
(CN12)
(CN4)
B10 CLFD
B20 PVW P
PVW OUTPUT
CLEAN OUTPUT
(CN13)
(CN5)
B24 AUX 1
B22 AUX 3
B6 AUX 2
B4 AUX 4
AUX BUS OUTPUTS
3
1
(CN14)
(CN6)
4
2
(CN15)
(CN7)
B8 ED PVW
B2 ED PVW
EDIT PVW OUTPUTS
2
1
(CN16)
(CN8)
OTHERS GND

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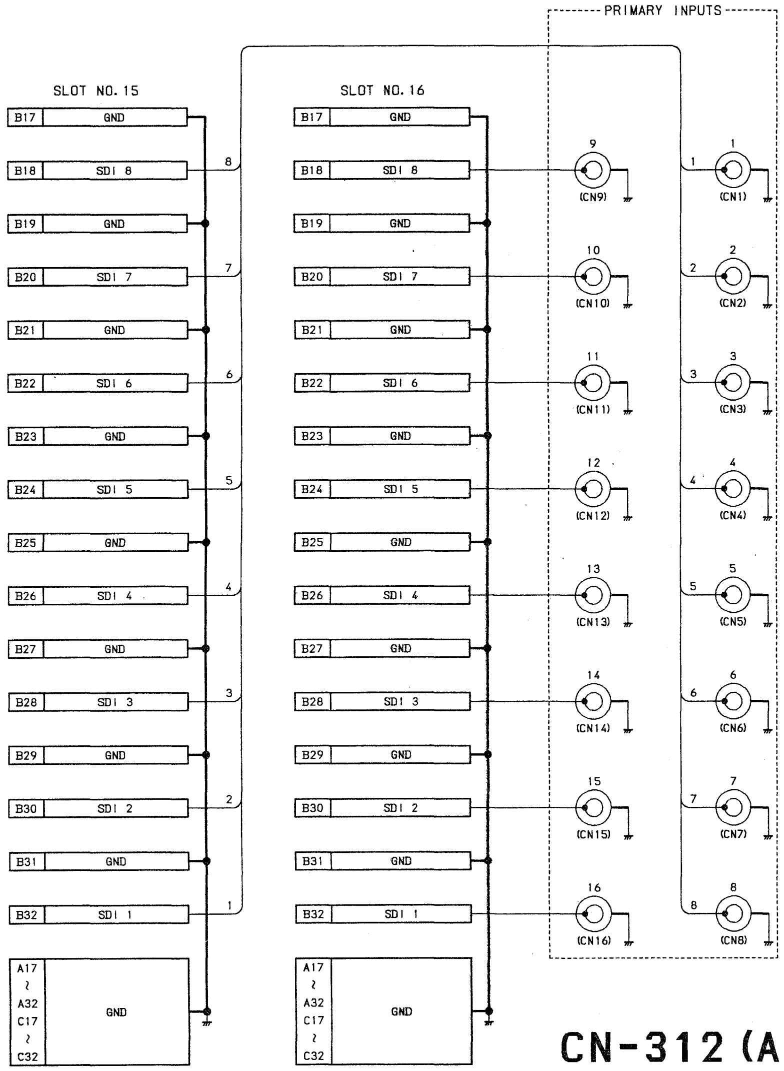
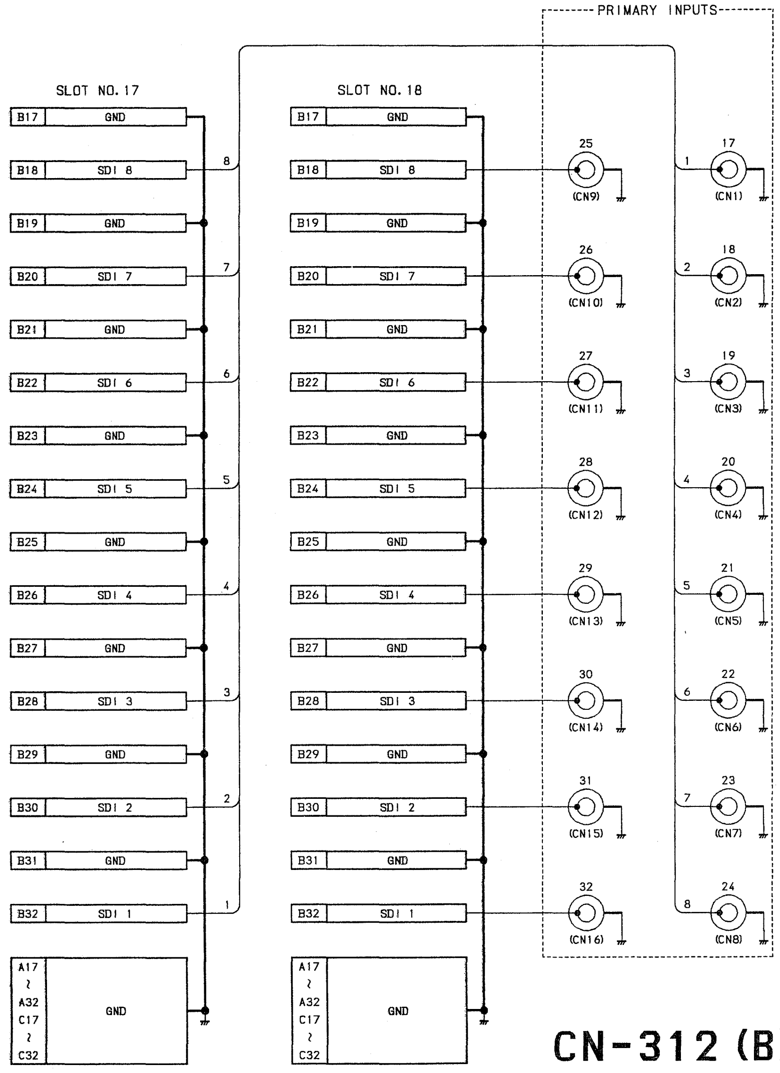
CN-311
1-636-519-11, 12
DVS-8000

CN-312 (A) PRIMARY INPUT CONNECTOR BOARD
CN-312 (B) PRIMARY INPUT CONNECTOR BOARD


PRIMARY INPUTS
SLOT NO. 15
SLOT NO. 16
B17 GND
B18 SDI 8
B19 GND
B20 SDI 7
B21 GND
B22 SDI 6
B23 GND
B24 SDI 5
B25 GND
B26 SDI 4
B27 GND
B28 SDI 3
B29 GND
B30 SDI 2
B31 GND
B32 SDI 1
A17 ~ A32 C17 ~ C32 GND
9 (CN9)
10 (CN10)
11 (CN11)
12 (CN12)
13 (CN13)
14 (CN14)
15 (CN15)
16 (CN16)
1 (CN1)
2 (CN2)
3 (CN3)
4 (CN4)
5 (CN5)
6 (CN6)
7 (CN7)
8 (CN8)

CN-312 (A)

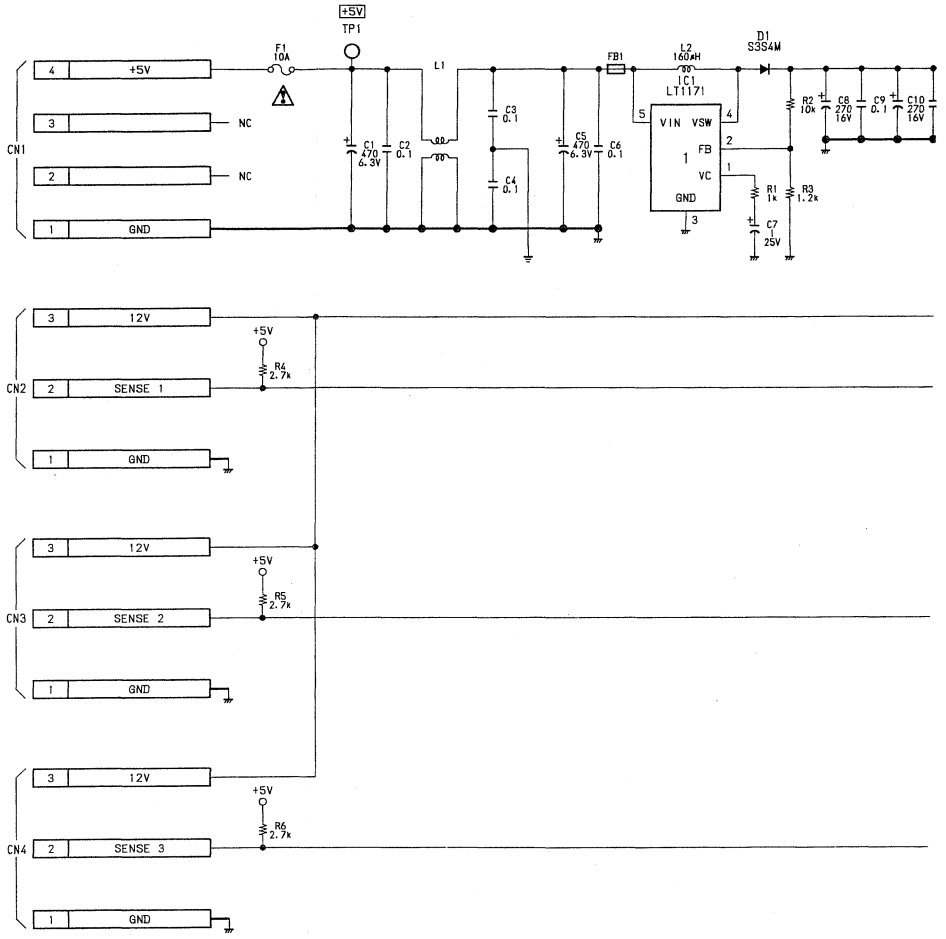
1-636-520-11, 12
DVS-8000


PRIMARY INPUTS
SLOT NO. 17
SLOT NO. 18
B17 GND
B18 SDI 8
B19 GND
B20 SDI 7
B21 GND
B22 SDI 6
B23 GND
B24 SDI 5
B25 GND
B26 SDI 4
B27 GND
B28 SDI 3
B29 GND
B30 SDI 2
B31 GND
B32 SDI 1
A17 ~ A32 C17 ~ C32 GND
25 (CN9)
26 (CN10)
27 (CN11)
28 (CN12)
29 (CN13)
30 (CN14)
31 (CN15)
32 (CN16)
17 (CN1)
18 (CN2)
19 (CN3)
20 (CN4)
21 (CN5)
22 (CN6)
23 (CN7)
24 (CN8)

CN-312 (B)

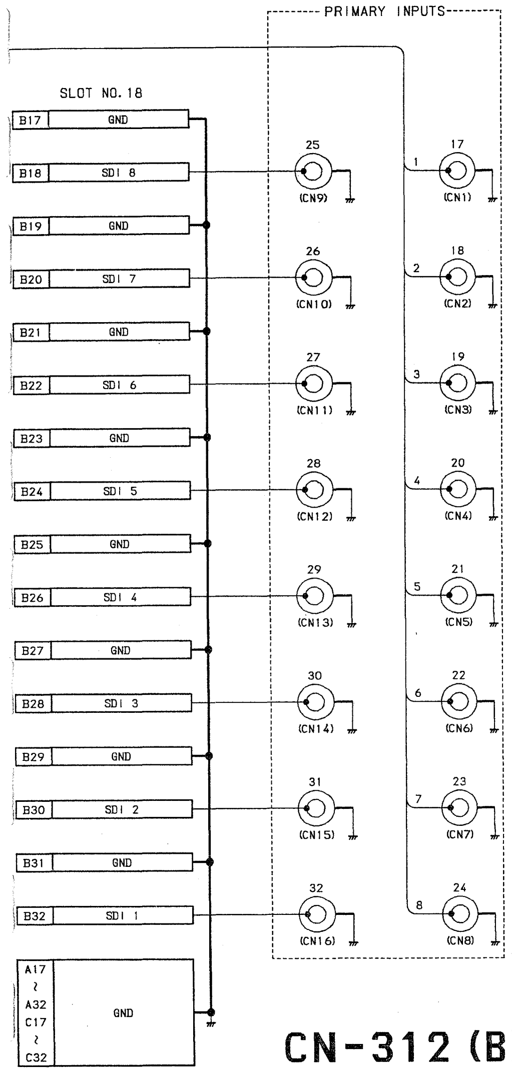
1-636-520-11, 12
DVS-8000

CN-456 POWER SUPPLY CONNECTOR BOARD


+5V
TP1
CN1
4 +5V
3 NC
2 NC
1 GND
F1 10A
C1 470 6.3V
C2 0.1
L1
C3 0.1
C4 0.1
C5 470 6.3V
C6 0.1
FB1
L2 160μH
IC1 LT1171
VIN VSW
FB
VC
GND
D1 S3S4M
R2 10k
C8 270 16V
C9 0.1
C10 270 16V
R1 1k
R3 1.2k
C7 1 25V
CN2
3 12V
2 SENSE 1
1 GND
R4 2.7k
CN3
3 12V
2 SENSE 2
1 GND
R5 2.7k
CN4
3 12V
2 SENSE 3
1 GND
R6 2.7k

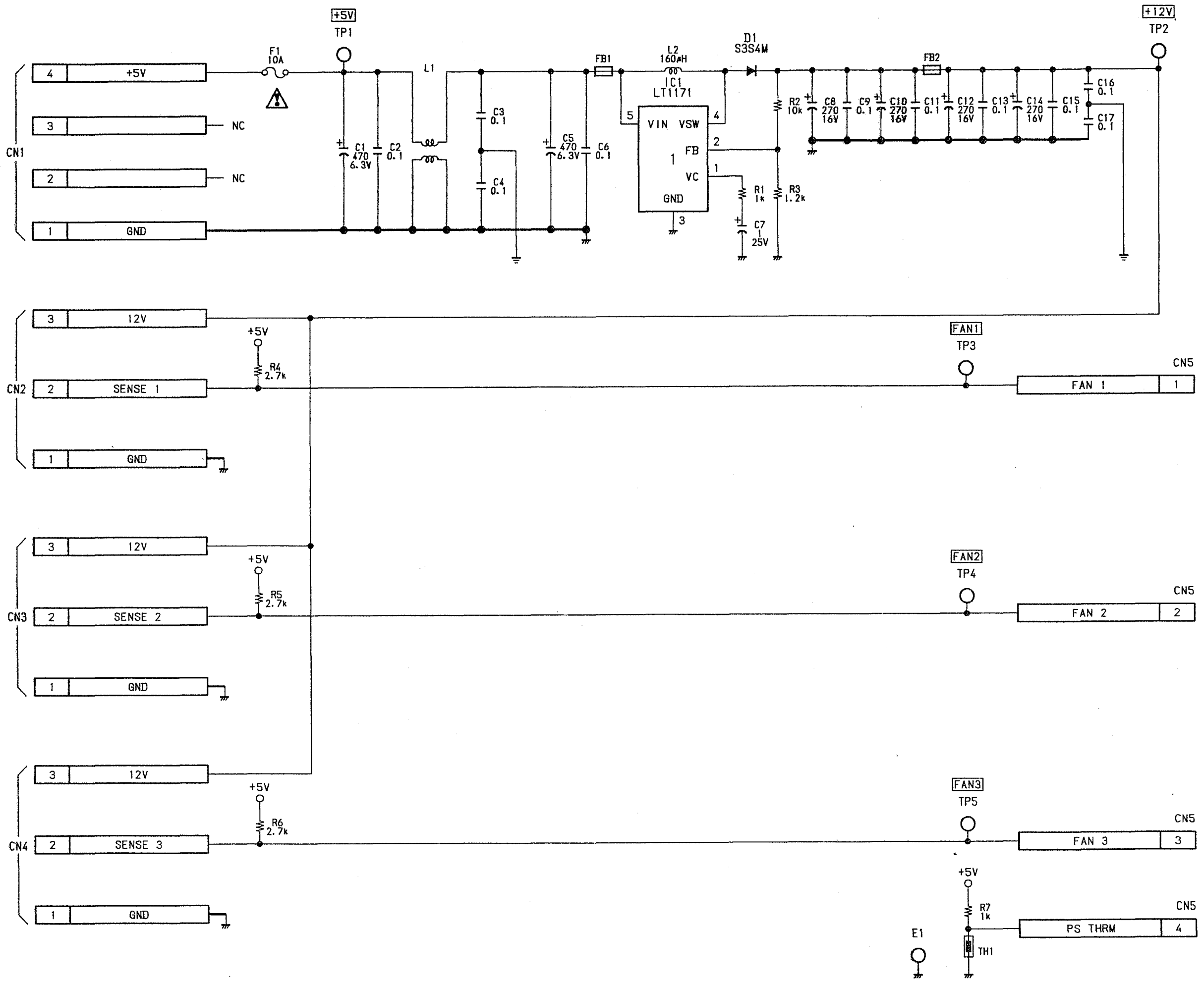
CN-456 POWER SUPPLY CONNECTOR BOARD

CN-503 CHROMA KEY INPUT CONNECTOR BOARD



PRIMARY INPUTS
SLOT NO. 18
B17 GND
B18 SDI 8
B19 GND
B20 SDI 7
B21 GND
B22 SDI 6
B23 GND
B24 SDI 5
B25 GND
B26 SDI 4
B27 GND
B28 SDI 3
B29 GND
B30 SDI 2
B31 GND
B32 SDI 1
A17 ≀ A32 C17 ≀ C32 GND
25 (CN9)
26 (CN10)
27 (CN11)
28 (CN12)
29 (CN13)
30 (CN14)
31 (CN15)
32 (CN16)
1 17 (CN1)
2 18 (CN2)
3 19 (CN3)
4 20 (CN4)
5 21 (CN5)
6 22 (CN6)
7 23 (CN7)
8 24 (CN8)

CN-312 (B)
1-636-520-11, 12
DVS-8000



CN1
4 +5V
3 NC
2 NC
1 GND
F1 10A
+5V TP1
L1
C1 470 6.3V
C2 0.1
C3 0.1
C4 0.1
C5 470 6.3V
C6 0.1
FB1
L2 160μH
IC1 LT1171
VIN VSW FB VC GND
D1 S3S4M
R1 1k
R2 10k
R3 1.2k
C7 1 25V
C8 270 16V
C9 0.1
C10 270 16V
C11 0.1
C12 270 16V
C13 0.1
C14 270 16V
C15 0.1
FB2
C16 0.1
C17 0.1
+12V TP2
CN2
3 12V
2 SENSE 1
1 GND
+5V R4 2.7k
FAN1 TP3
CN5 FAN 1 1
CN3
3 12V
2 SENSE 2
1 GND
+5V R5 2.7k
FAN2 TP4
CN5 FAN 2 2
CN4
3 12V
2 SENSE 3
1 GND
+5V R6 2.7k
FAN3 TP5
CN5 FAN 3 3
+5V R7 1k TH1
CN5 PS THRM 4
E1

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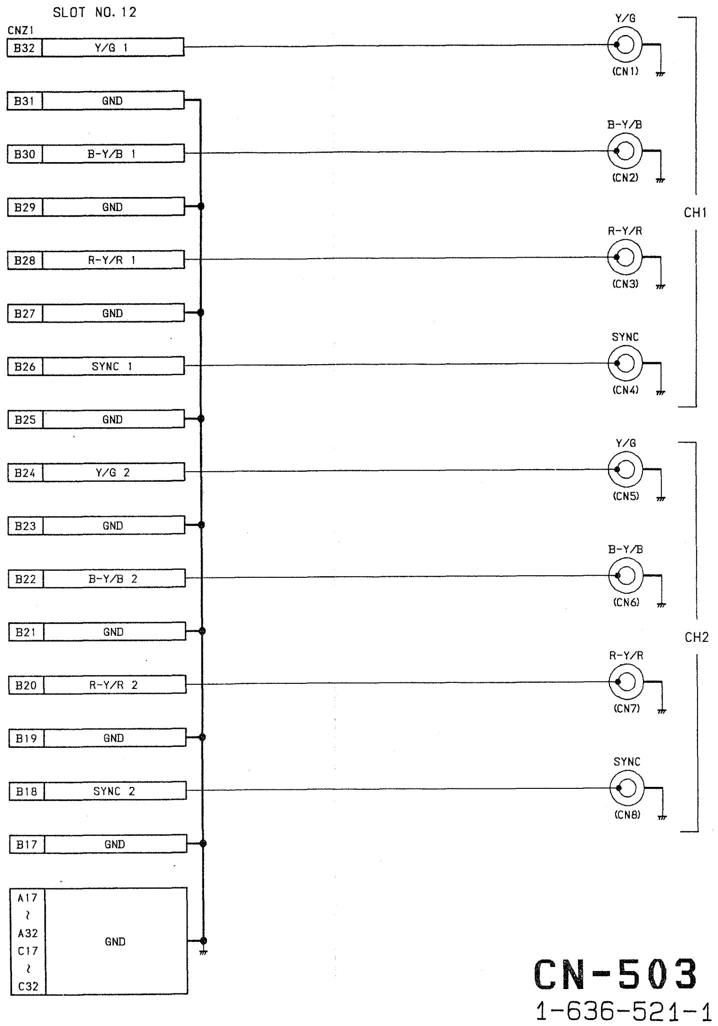
DVS-8000
BKDS-8090



SLOT NO. 12
CN21
B32 Y/G 1
B31 GND
B30 B-Y/B 1
B29 GND
B28 R-Y/R 1
B27 GND
B26 SYNC 1
B25 GND
B24 Y/G 2
B23 GND
B22 B-Y/B 2
B21 GND
B20 R-Y/R 2
B19 GND
B18 SYNC 2
B17 GND
A17 ≀ A32 C17 ≀ C32 GND
Y/G (CN1)
B-Y/B (CN2)
R-Y/R (CN3)
SYNC (CN4)
CH1
Y/G (CN5)
B-Y/B (CN6)
R-Y/R (CN7)
SYNC (CN8)
CH2

CN-503
1-636-521-11, 12
DVS-8000

MB-245 (1/5) MOTHER BOARD

S/N; 10001 through 10060

1

CN1

1	
2	PS THM
3	GND
4	FAN 1
5	FAN 2
6	FAN 3

(08)

CPU-57

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	FAN 1	OE
9	VCNT A6	VCNT A7	FAN 2	
10		PS THRM	FAN 3	
11				
12				
13	D1/D2	525/625	REF EXT	CKX CPU
14	COM 68	COM 69	COM 70	HD
15	COM 64	COM 65	COM 66	VZ
16	+5V MON	DIG/ANA	ADV/DLY	CF IN
17	SG STATUS	COM 57	COM 58	COM 59
18	COM 52	COM 53	COM 54	COM 55
19	COM 48	COM 49	COM 50	COM 51
20	COM 44	COM 45	COM 46	COM 47
21	COM 40	COM 41	COM 42	COM 43
22	COM 36	COM 37	COM 38	COM 39
23	COM 32	COM 33	COM 34	COM 35
24	COM 28	COM 29	COM 30	COM 31
25	COM 24	COM 25	COM 26	COM 27
26	COM 20	COM 21	COM 22	COM 23
27	COM 16	COM 17	COM 18	COM 19
28	COM 12	COM 13	COM 14	COM 15
29	COM 08	COM 09	COM 10	COM 11
30	COM 04	COM 05	COM 06	COM 07
31	GND	GND	COM 02	COM 03
32	GND	GND		

2

	A	B	C	D
1	A16	A17	A18	A19
2	A12	A13	A14	A15
3	A08	A09	A10	A11
4	A04	A05	A06	A07
5	A00	A01	A02	A03
6	MEMHH:L	MEMHL:L	MEMLH:L	MEMLL:L
7	READ:L	WRITE:L	AS:L	DS:L
8	CPU 95	CPU 94	WBVSEN:L	R/W
9	SBUSEN:L	CLR80B:L	CLR80C:L	RESET:L
10	CLK25M	STOBCS:L	STOCCS:L	CTCCS:L
11	PLO2CS:L	CLK9.6K	CPU 92	CPU 93
12	CPU 86	CPU 87	CPU 88	CPU 89
13	CPU 82	CPU 83	CPU 84	CPU 85
14	CPU 78	CPU 79	CPU 80	CPU 81
15	CPU 74	CPU 75	CPU 76	CPU 77
16	CPU 70	CPU 71	CPU 72	CPU 73
17	CPU 66	CPU 67	CPU 68	CPU 69
18			CPU 64	CPU 65
19			CTCIRQ3	SIOIRQ3
20			SIOIRQ6	SBACK:L
21			CPU 52	CPU 53
22			CPU 48	CPU 49
23			D30	D31
24			D26	D27
25			D22	D23
26			D18	D19
27			D14	D15
28	D08	D09	D10	D11
29	D04	D05	D06	D07
30	TXD	RXD	RTS	CTS
31	GND	GND		
32	GND	GND		

3

4

	A	B	C
1			
2	GPI IN 3	GPI IN 2	GPI IN 1
3	GPI IN 6	GPI IN 5	GPI IN 4
4		GPI IN 8	GPI IN 7
5	GPI OUT 1A	GPI OUT 2A	GPI OUT 3A
6	GPI OUT 1B	GPI OUT 2B	GPI OUT 3B
7	GPI OUT 4A	GPI OUT 5A	GPI OUT 6A
8	GPI OUT 4B	GPI OUT 5B	GPI OUT 6B
9	GPI OUT 7A		
10	GPI OUT 7B		
11	TXD		RXD
12	RTS		CTS
13	CON TX B		CON RX B
14	CON TX A		CON RX A
15	FDD TX B		FDD RX B
16	FDD TX A		FDD RX A
17	EDT A TX B		EDT A RX B
18	EDT A TX A		EDT A RX A
19	EDT B TX B		EDT B RX B
20	EDT B TX A		EDT B RX A
21	DME TX B		DME RX B
22	DME TX A		DME RX A
23	AUX TX B		AUX RX B
24	AUX TX A		AUX RX A
25	MTX TX B		MTX RX B
26	MTX TX A		MTX RX A
27	USER D2 B		USER D1 B
28	USER D2 A		USER D1 A
29	SPARE D2 B		SPARE D1 B
30	SPARE D2 A		SPARE D1 A
31	GND	GND	GND
32	GND	GND	GND

5

1

CPU

(09)

SG-153

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	CK16 (13.5M)	CK15 (13.5M)	CK14 (13.5M)	CK13 (13.5M)
10	CK12 (13.5M)	CK11 (13.5M)	CK10 (13.5M)	CK9 (13.5M)
11	CK4 (27.0M)	CK3 (27.0M)	CK2 (27.0M)	CK1 (27.0M)
12	CK8 (27.0M)	CK7 (27.0M)	CK6 (27.0M)	CK5 (27.0M)
13	D1/D2	525/625	REF EXT	CKX CPU
14	VCNT A6	VCNT A7	FLD RST	HD
15	VCNT A5	VCNT A4	VCNT A3	VZ
16	+5V MON	DIG/ANA	ADV/DLY	CF IN
17	COM 56	COM 57	COM 58	COM 59
18	COM 52	COM 53	COM 54	COM 55
19	COM 48	COM 49	COM 50	COM 51
20	COM 44	COM 45	COM 46	COM 47
21	COM 40	COM 41	COM 42	COM 43
22	COM 36	COM 37	COM 38	COM 39
23	COM 32	COM 33	COM 34	COM 35
24	COM 28	COM 29	COM 30	COM 31
25	COM 24	COM 25	COM 26	COM 27
26	COM 20	COM 21	COM 22	COM 23
27	COM 16	COM 17	COM 18	COM 19
28	COM 12	COM 13	COM 14	COM 15
29	COM 08	COM 09	COM 10	COM 11
30	COM 04	COM 05	COM 06	COM 07
31	GND	GND	COM 02	COM 03
32	GND	GND		

	A	B	C	D
1	A16	A17	A18	A19
2	A12	A13	A14	A15
3	A08	A09	A10	A11
4	A04	A05	A06	A07
5	A00	A01	A02	A03
6	MEMHH:L	MEMHL:L	MEMLH:L	MEMLL:L
7	READ:L	WRITE:L	AS:L	DS:L
8	CPU 95	CPU 94	WBVSEN:L	R/W
9	SBUSEN:L	CLR80B:L	CLR80C:L	RESET:L
10	CLK25M	STOBCS:L	STOCCS:L	CTCCS:L
11	PLO2CS:L	CLK9.6K	CPU 92	CPU 93
12	CPU 86	CPU 87	CPU 88	CPU 89
13	CPU 82	CPU 83	CPU 84	CPU 85
14	CPU 78	CPU 79	CPU 80	CPU 81
15	CPU 74	CPU 75	CPU 76	CPU 77
16	CPU 70	CPU 71	CPU 72	CPU 73
17	CPU 66	CPU 67	CPU 68	CPU 69
18	BB 8	BB 9	CPU 64	CPU 65
19	BB 6	BB 7	CTCIRQ3	SIOIRQ3
20	BB 4	BB 5	SIOIRQ6	SBACK:L
21	BB 2	BB 3	CPU 52	CPU 53
22	BB 0	BB 1	CPU 48	CPU 49
23	PVW OUT 8	PVW OUT 9	D30	D31
24	PVW OUT 6	PVW OUT 7	D26	D27
25	PVW OUT 4	PVW OUT 5	D22	D23
26	PVW OUT 2	PVW OUT 3	D18	D19
27	PVW OUT 0	PVW OUT 1	D14	D15
28	D08	D09	D10	D11
29	D04	D05	D06	D07
30	TXD	RXD	RTS	CTS
31	GND	GND		
32	GND	GND		

	A	B	C
1			
2	TALLY COM	TALLY COM	TALLY COM
3	TALLY COM	TALLY COM	TALLY COM
4	TALLY COM	TALLY COM	TALLY COM
5	TALLY 1	TALLY 2	TALLY 3
6	TALLY 4	TALLY 5	TALLY 6
7	TALLY 7	TALLY 8	TALLY 9
8	TALLY 10	TALLY 11	TALLY 12
9	TALLY 13	TALLY 14	TALLY 15
10	TALLY 16	TALLY 17	TALLY 18
11	TALLY 19	TALLY 20	TALLY 21
12	TALLY 22	TALLY 23	TALLY 24
13	TALLY 25	TALLY 26	TALLY 27
14	TALLY 28	TALLY 29	TALLY 30
15	TALLY 31	TALLY 32	TALLY ME 1
16	TALLY ME 2	TALLY CK 1	TALLY CK 2
17	GND	GND	GND
18	GND	GND	GND
19	GND	GND	GND
20	GND	GND	GND
21	GND	REF OUT	GND
22	GND	GND	GND
23	GND	MONITOR OUT	GND
24	GND	GND	GND
25	GND	SPARE	GND
26	GND	GND	GND
27	GND	SPARE	GND
28	GND	GND	GND
29	GND	REF IN	GND
30	GND	GND	GND
31	GND	REF IN	GND
32	GND	GND	GND

2

SG

(10)

WKG-5

X

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK9 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK1 (27.0M)
11				
12				
13				
14	COM 68	COM 69	COM 70	COM 71
15	COM 64	COM 65	COM 66	COM 67
16	COM 60	COM 61	COM 62	COM 63
17	COM 56	COM 57	COM 58	COM 59
18	COM 52	COM 53	COM 54	COM 55
19	COM 48	COM 49	COM 50	COM 51
20	COM 44	COM 45	COM 46	COM 47
21	LSLD 110	LSLD 111	LSLD 112	LSLD 113
22	LSLD 16	LSLD 17	LSLD 18	LSLD 19
23	LSLD 12	LSLD 13	LSLD 14	LSLD 15
24	LSLD 212	LSLD 213	LSLD 10	LSLD 11
25	LSLD 28	LSLD 29	LSLD 210	LSLD 211
26	LSLD 24	LSLD 25	LSLD 26	LSLD 27
27	LSLD 20	LSLD 21	LSLD 22	LSLD 23
28	LSLD 310	LSLD 311	LSLD 312	LSLD 313
29	LSLD 36	LSLD 37	LSLD 38	LSLD 39
30	LSLD 32	LSLD 33	LSLD 34	LSLD 35
31	GND	GND	LSLD 30	LSLD 31
32	GND	GND		

Y

	A	B	C	D
1				
2				
3				
4				
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6				
7				
8	WSLD 112	WSLD 113		
9	WSLD 18	WSLD 19	WSLD 110	WSLD 111
10	WSLD 14	WSLD 15	WSLD 16	WSLD 17
11	WSLD 10	WSLD 11	WSLD 12	WSLD 13
12	WSLD 210	WSLD 211	WSLD 212	WSLD 213
13	WSLD 26	WSLD 27	WSLD 28	WSLD 29
14	WSLD 22	WSLD 23	WSLD 24	WSLD 25
15	WSLD 312	WSLD 313	WSLD 20	WSLD 21
16	WSLD 38	WSLD 39	WSLD 310	WSLD 311
17	WSLD 34	WSLD 35	WSLD 36	WSLD 37
18	WSLD 30	WSLD 31	WSLD 32	WSLD 33
19				
20				
21				
22				
23				
24				
25				
26	CPU 30	CPU 31	CPU 32	CPU 33
27	CPU 26	CPU 27	CPU 28	CPU 29
28	CPU 22	CPU 23	CPU 24	CPU 25
29	CPU 18	CPU 19	CPU 20	CPU 21
30	CPU 14	CPU 15	CPU 16	CPU 17
31	GND	GND		WKG5 IN
32	GND	GND		

Z

	A	B	C
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3

ENHANCED WIPE

(11)

WKG-4

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK9 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK1 (27.0M)
11				
12				
13				
14	COM 68	COM 69	COM 70	COM 71
15	COM 64	COM 65	COM 66	COM 67
16	COM 60	COM 61	COM 62	COM 63
17	COM 56	COM 57	COM 58	COM 59
18	COM 52	COM 53	COM 54	COM 55
19	COM 48	COM 49	COM 50	COM 51
20	COM 44	COM 45	COM 46	COM 47
21	LSLD 110	LSLD 111	LSLD 112	LSLD 113
22	LSLD 16	LSLD 17	LSLD 18	LSLD 19
23	LSLD 12	LSLD 13	LSLD 14	LSLD 15
24	LSLD 212	LSLD 213	LSLD 10	LSLD 11
25	LSLD 28	LSLD 29	LSLD 210	LSLD 211
26	LSLD 24	LSLD 25	LSLD 26	LSLD 27
27	LSLD 20	LSLD 21	LSLD 22	LSLD 23
28	LSLD 310	LSLD 311	LSLD 312	LSLD 313
29	LSLD 36	LSLD 37	LSLD 38	LSLD 39
30	LSLD 32	LSLD 33	LSLD 34	LSLD 35
31	GND	GND	LSLD 30	LSLD 31
32	GND	GND		

	A	B	C	D
1				
2				
3				
4				
5				
6				
7				
8	WSLD 112	WSLD 113		
9	WSLD 18	WSLD 19	WSLD 110	WSLD 111
10	WSLD 14	WSLD 15	WSLD 16	WSLD 17
11	WSLD 10	WSLD 11	WSLD 12	WSLD 13
12	WSLD 210	WSLD 211	WSLD 212	WSLD 213
13	WSLD 26	WSLD 27	WSLD 28	WSLD 29
14	WSLD 22	WSLD 23	WSLD 24	WSLD 25
15	WSLD 312	WSLD 313	WSLD 20	WSLD 21
16	WSLD 38	WSLD 39	WSLD 310	WSLD 311
17	WSLD 34	WSLD 35	WSLD 36	WSLD 37
18	WSLD 30	WSLD 31	WSLD 32	WSLD 33
19				
20				
21				
22				
23				
24				
25				
26	CPU 30	CPU 31	CPU 32	CPU 33
27	CPU 26	CPU 27	CPU 28	CPU 29
28	CPU 22	CPU 23	CPU 24	CPU 25
29	CPU 18	CPU 19	CPU 20	CPU 21
30	CPU 14	CPU 15	CPU 16	CPU 17
31	GND	GND		WKG5 IN
32	GND	GND		

	A	B	C
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4

BASIC WIPE

MB-245 (1/5)
1-636-516-12
DVS-8000

B-SYX121-MB-D1#13

A | B | C | D | E | F | G | H

MB-245 (1/5) MOTHER BOARD

S/N; 10061 and higher

(08)
CPU-57

CN1

1	
2	PS THM
3	GND
4	FAN 1
5	FAN 2
6	FAN 3

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	FAN 1	OE
9	VCNT A6	VCNT A7	FAN 2	
10		PS THRM	FAN 3	
11				
12				
13	D1/D2	525/625	REF EXT	CKX CPU
14	COM 68	COM 69	COM 70	HD
15	COM 64	COM 65	COM 66	VZ
16	+5V MON	DIG/ANA	ADV/DLY	CF IN
17	SG STATUS	COM 57	COM 58	COM 59
18	COM 52	COM 53	COM 54	COM 55
19	COM 48	COM 49	COM 50	COM 51
20	COM 44	COM 45	COM 46	COM 47
21	COM 40	COM 41	COM 42	COM 43
22	COM 36	COM 37	COM 38	COM 39
23	COM 32	COM 33	COM 34	COM 35
24	COM 28	COM 29	COM 30	COM 31
25	COM 24	COM 25	COM 26	COM 27
26	COM 20	COM 21	COM 22	COM 23
27	COM 16	COM 17	COM 18	COM 19
28	COM 12	COM 13	COM 14	COM 15
29	COM 08	COM 09	COM 10	COM 11
30	COM 04	COM 05	COM 06	COM 07
31	GND	GND	COM 02	COM 03
32	GND	GND		

	A	B	C	D
1	A16	A17	A18	A19
2	A12	A13	A14	A15
3	A08	A09	A10	A11
4	A04	A05	A06	A07
5	A00	A01	A02	A03
6	MEMHH;L	MEMHL;L	MEMLH;L	MEMLL;L
7	READ;L	WRITE;L	AS;L	DS;L
8	CPU 95	CPU 94	WBVSEN;L	R/W
9	SBUSEN;L	CLR80B;L	CLR80C;L	RESET;L
10	CLK25M	STOBCS;L	STOCCS;L	CTCCS;L
11	PL02CS;L	CLK9.6K	CPU 92	CPU 93
12	CPU 86	CPU 87	CPU 88	CPU 89
13	CPU 82	CPU 83	CPU 84	CPU 85
14	CPU 78	CPU 79	CPU 80	CPU 81
15	CPU 74	CPU 75	CPU 76	CPU 77
16	CPU 70	CPU 71	CPU 72	CPU 73
17	CPU 66	CPU 67	CPU 68	CPU 69
18			CPU 64	CPU 65
19			CTCIRQ3	SIOIRQ3
20			SIOIRQ6	SBACK;L
21			CPU 52	CPU 53
22			CPU 48	CPU 49
23			D30	D31
24			D26	D27
25			D22	D23
26			D18	D19
27			D14	D15
28	D08	D09	D10	D11
29	D04	D05	D06	D07
30	TXD	RXD	RTS	CTS
31	GND	GND		
32	GND	GND		

	A	B	C
1	GND	GND	GND
2	GPI IN 1	GPI IN 2	GPI IN 3
3	GPI IN 4	GPI IN 5	GPI IN 6
4	GPI IN 7	GPI IN 8	
5	GPI OUT 1A	GPI OUT 2A	GPI OUT 3A
6	GPI OUT 1B	GPI OUT 2B	GPI OUT 3B
7	GPI OUT 4A	GPI OUT 5A	GPI OUT 6A
8	GPI OUT 4B	GPI OUT 5B	GPI OUT 6B
9	GPI OUT 7A		
10	GPI OUT 7B		
11	TXD		RXD
12	RTS		CTS
13	CON TX B		CON RX B
14	CON TX A		CON RX A
15	FDD TX B		FDD RX B
16	FDD TX A		FDD RX A
17	EDT A TX B		EDT A RX B
18	EDT A TX A		EDT A RX A
19	EDT B TX B		EDT B RX B
20	EDT B TX A		EDT B RX A
21	DME TX B		DME RX B
22	DME TX A		DME RX A
23	AUX TX B		AUX RX B
24	AUX TX A		AUX RX A
25	MTX TX B		MTX RX B
26	MTX TX A		MTX RX A
27	USER D2 B		USER D1 B
28	USER D2 A		USER D1 A
29	SPARE D2 B		SPARE D1 B
30	SPARE D2 A		SPARE D1 A
31	GND	GND	GND
32	GND	GND	GND

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CPU

(09)
SG-153

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	CK16 (13.5M)	CK15 (13.5M)	CK14 (13.5M)	CK13 (13.5M)
10	CK12 (13.5M)	CK11 (13.5M)	CK10 (13.5M)	CK9 (13.5M)
11	CK4 (27.0M)	CK3 (27.0M)	CK2 (27.0M)	CK1 (27.0M)
12	CK8 (27.0M)	CK7 (27.0M)	CK6 (27.0M)	CK5 (27.0M)
13	D1/D2	525/625	REF EXT	CKX CPU
14	GND	GND	GND	HD
15	GND	GND	GND	VZ
16	+5V MON	DIG/ANA	ADV/DLY	CF IN
17	SG STATUS	COM 57	COM 58	COM 59
18	COM 52	COM 53	COM 54	COM 55
19	COM 48	COM 49	COM 50	COM 51
20	COM 44	COM 45	COM 46	COM 47
21	COM 40	COM 41	COM 42	COM 43
22	COM 36	COM 37	COM 38	COM 39
23	COM 32	COM 33	COM 34	COM 35
24	COM 28	COM 29	COM 30	COM 31
25	COM 24	COM 25	COM 26	COM 27
26	COM 20	COM 21	COM 22	COM 23
27	COM 16	COM 17	COM 18	COM 19
28	COM 12	COM 13	COM 14	COM 15
29	COM 08	COM 09	COM 10	COM 11
30	COM 04	COM 05	COM 06	COM 07
31	GND	GND	COM 02	COM 03
32	GND	GND		

	A	B	C	D
1	A16	A17	A18	A19
2	A12	A13	A14	A15
3	A08	A09	A10	A11
4	A04	A05	A06	A07
5	A00	A01	A02	A03
6	MEMHH;L	MEMHL;L	MEMLH;L	MEMLL;L
7	READ;L	WRITE;L	AS;L	DS;L
8	CPU 95	CPU 94	WBVSEN;L	R/W
9	SBUSEN;L	CLR80B;L	CLR80C;L	RESET;L
10	CLK25M	STOBCS;L	STOCCS;L	CTCCS;L
11	PL02CS;L	CLK9.6K	CPU 92	CPU 93
12	CPU 86	CPU 87	CPU 88	CPU 89
13	CPU 82	CPU 83	CPU 84	CPU 85
14	CPU 78	CPU 79	CPU 80	CPU 81
15	CPU 74	CPU 75	CPU 76	CPU 77
16	CPU 70	CPU 71	CPU 72	CPU 73
17	CPU 66	CPU 67	CPU 68	CPU 69
18	BB 8	BB 9	CPU 64	CPU 65
19	BB 6	BB 7	CTCIRQ3	SIOIRQ3
20	BB 4	BB 5	SIOIRQ6	SBACK;L
21	BB 2	BB 3	CPU 52	CPU 53
22	BB 0	BB 1	CPU 48	CPU 49
23	PVW OUT 8	PVW OUT 9	D30	D31
24	PVW OUT 6	PVW OUT 7	D26	D27
25	PVW OUT 4	PVW OUT 5	D22	D23
26	PVW OUT 2	PVW OUT 3	D18	D19
27	PVW OUT 0	PVW OUT 1	D14	D15
28	D08	D09	D10	D11
29	D04	D05	D06	D07
30	TXD	RXD	RTS	CTS
31	GND	GND		
32	GND	GND		

	A	B	C
1	GND	GND	GND
2	TALLY COM	TALLY COM	TALLY COM
3	TALLY COM	TALLY COM	TALLY COM
4	TALLY COM	TALLY COM	TALLY COM
5	TALLY 1	TALLY 2	TALLY 3
6	TALLY 4	TALLY 5	TALLY 6
7	TALLY 7	TALLY 8	TALLY 9
8	TALLY 10	TALLY 11	TALLY 12
9	TALLY 13	TALLY 14	TALLY 15
10	TALLY 16	TALLY 17	TALLY 18
11	TALLY 19	TALLY 20	TALLY 21
12	TALLY 22	TALLY 23	TALLY 24
13	TALLY 25	TALLY 26	TALLY 27
14	TALLY 28	TALLY 29	TALLY 30
15	TALLY 31	TALLY 32	TALLY ME 1
16	TALLY ME 2	TALLY CK 1	TALLY CK 2
17	GND	GND	GND
18	GND	GND	GND
19	GND	GND	GND
20	GND	GND	GND
21	GND	REF OUT	GND
22	GND	GND	GND
23	GND	MONITOR OUT	GND
24	GND	GND	GND
25	GND	SPARE	GND
26	GND	GND	GND
27	GND	SPARE	GND
28	GND	GND	GND
29	GND	REF IN	GND
30	GND	GND	GND
31	GND	REF IN	GND
32	GND	GND	GND

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SG

(10)
WKG-5

X

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK9 (13.5M)
10	GND	GND	GND	CK1 (27.0M)
11				
12				
13				
14	COM 68	COM 69	COM 70	COM 71
15	COM 64	COM 65	COM 66	COM 67
16	COM 60	COM 61	COM 62	COM 63
17	COM 56	COM 57	COM 58	COM 59
18	COM 52	COM 53	COM 54	COM 55
19	COM 48	COM 49	COM 50	COM 51
20	COM 44	COM 45	COM 46	COM 47
21	LSLD 110	LSLD 111	LSLD 112	LSLD 113
22	LSLD 16	LSLD 17	LSLD 18	LSLD 19
23	LSLD 12	LSLD 13	LSLD 14	LSLD 15
24	LSLD 212	LSLD 213	LSLD 10	LSLD 11
25	LSLD 28	LSLD 29	LSLD 210	LSLD 211
26	LSLD 24	LSLD 25	LSLD 26	LSLD 27
27	LSLD 20	LSLD 21	LSLD 22	LSLD 23
28	LSLD 310	LSLD 311	LSLD 312	LSLD 313
29	LSLD 36	LSLD 37	LSLD 38	LSLD 39
30	LSLD 32	LSLD 33	LSLD 34	LSLD 35
31	GND	GND	LSLD 30	LSLD 31
32	GND	GND		

Y

	A	B	C	D
1				
2				
3				
4				
5				
6				
7				
8	WSLD 112	WSLD 113		
9	WSLD 18	WSLD 19	WSLD 110	WSLD 111
10	WSLD 14	WSLD 15	WSLD 16	WSLD 17
11	WSLD 10	WSLD 11	WSLD 12	WSLD 13
12	WSLD 210	WSLD 211	WSLD 212	WSLD 213
13	WSLD 26	WSLD 27	WSLD 28	WSLD 29
14	WSLD 22	WSLD 23	WSLD 24	WSLD 25
15	WSLD 312	WSLD 313	WSLD 20	WSLD 21
16	WSLD 38	WSLD 39	WSLD 310	WSLD 311
17	WSLD 34	WSLD 35	WSLD 36	WSLD 37
18	WSLD 30	WSLD 31	WSLD 32	WSLD 33
19				
20				
21				
22				
23				
24				
25				
26	CPU 30	CPU 31	CPU 32	CPU 33
27	CPU 26	CPU 27	CPU 28	CPU 29
28	CPU 22	CPU 23	CPU 24	CPU 25
29	CPU 18	CPU 19	CPU 20	CPU 21
30	CPU 14	CPU 15	CPU 16	CPU 17
31	GND	GND		WKG5 IN
32	GND	GND		

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	A	B	C
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ENHANCED WIPE

(11)
WKG-4

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK9 (13.5M)
10	GND	GND	GND	CK1 (27.0M)
11				
12				
13				
14	COM 68	COM 69	COM 70	COM 71
15	COM 64	COM 65	COM 66	COM 67
16	COM 60	COM 61	COM 62	COM 63
17	COM 56	COM 57	COM 58	COM 59
18	COM 52	COM 53	COM 54	COM 55
19	COM 48	COM 49	COM 50	COM 51
20	COM 44	COM 45	COM 46	COM 47
21	LSLD 110	LSLD 111	LSLD 112	LSLD 113
22	LSLD 16	LSLD 17	LSLD 18	LSLD 19
23	LSLD 12	LSLD 13	LSLD 14	LSLD 15
24	LSLD 212	LSLD 213	LSLD 10	LSLD 11
25	LSLD 28	LSLD 29	LSLD 210	LSLD 211
26	LSLD 24	LSLD 25	LSLD 26	LSLD 27
27	LSLD 20	LSLD 21	LSLD 22	LSLD 23
28	LSLD 310	LSLD 311	LSLD 312	LSLD 313
29	LSLD 36	LSLD 37	LSLD 38	LSLD 39
30	LSLD 32	LSLD 33	LSLD 34	LSLD 35
31	GND	GND	LSLD 30	LSLD 31
32	GND	GND		

	A	B	C	D
1				
2				
3				
4				
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6				
7				
8	WSLD 112	WSLD 113		
9	WSLD 18	WSLD 19	WSLD 110	WSLD 111
10	WSLD 14	WSLD 15	WSLD 16	WSLD 17
11	WSLD 10	WSLD 11	WSLD 12	WSLD 13
12	WSLD 210	WSLD 211	WSLD 212	WSLD 213
13	WSLD 26	WSLD 27	WSLD 28	WSLD 29
14	WSLD 22	WSLD 23	WSLD 24	WSLD 25
15	WSLD 312	WSLD 313	WSLD 20	WSLD 21
16	WSLD 38	WSLD 39	WSLD 310	WSLD 311
17	WSLD 34	WSLD 35	WSLD 36	WSLD 37
18	WSLD 30	WSLD 31	WSLD 32	WSLD 33
19				
20				
21				
22				
23				
24				
25				
26	CPU 30	CPU 31	CPU 32	CPU 33
27	CPU 26	CPU 27	CPU 28	CPU 29
28	CPU 22	CPU 23	CPU 24	CPU 25
29	CPU 18	CPU 19	CPU 20	CPU 21
30	CPU 14	CPU 15	CPU 16	CPU 17
31	GND	GND		WKG5 IN
32	GND	GND		

	A	B	C
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BASIC WIPE

MB-245 (1/5)
1-636-516-13
DVS-8000

B-SYX121-MB-D1#13

MB-245 (2/5) MOTHER BOARD

S/N; 10001 through 10060

(12) KPC-1

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK10 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK2 (27.0M)
11	MEFL 2 18	MEFL 2 19		
12	MEFL 2 14	MEFL 2 15	MEFL 2 16	MEFL 2 17
13	MEFL 2 10	MEFL 2 11	MEFL 2 12	MEFL 2 13
14	MEFL 1 16	MEFL 1 17	MEFL 1 18	MEFL 1 19
15	MEFL 1 12	MEFL 1 13	MEFL 1 14	MEFL 1 15
16	KYSR 2 18	KYSR 2 19	MEFL 1 10	MEFL 1 11
17	KYSR 2 14	KYSR 2 15	KYSR 2 16	KYSR 2 17
18	KYSR 2 10	KYSR 2 11	KYSR 2 12	KYSR 2 13
19	KYSR 1 16	KYSR 1 17	KYSR 1 18	KYSR 1 19
20	KYSR 1 12	KYSR 1 13	KYSR 1 14	KYSR 1 15
21	MEBG A 18	MEBG A 19	KYSR 1 10	KYSR 1 11
22	MEBG A 14	MEBG A 15	MEBG A 16	MEBG A 17
23	MEBG A 10	MEBG A 11	MEBG A 12	MEBG A 13
24	MEBG B 16	MEBG B 17	MEBG B 18	MEBG B 19
25	MEBG B 12	MEBG B 13	MEBG B 14	MEBG B 15
26	CRKY 18	CRKY 19	MEBG B 10	MEBG B 11
27	CRKY 14	CRKY 15	CRKY 16	CRKY 17
28	CRKY 10	CRKY 11	CRKY 12	CRKY 13
29	BKGD A 16	BKGD A 17	BKGD A 18	BKGD A 19
30	BKGD A 12	BKGD A 13	BKGD A 14	BKGD A 15
31	GND	GND	BKGD A 10	BKGD A 11
32	GND	GND		

	A	B	C	D
1	BKGD B 16	BKGD B 17	BKGD B 18	BKGD B 19
2	BKGD B 12	BKGD B 13	BKGD B 14	BKGD B 15
3	FILL 2 18	FILL 2 19	BKGD B 10	BKGD B 11
4	FILL 2 14	FILL 2 15	FILL 2 16	FILL 2 17
5	FILL 2 10	FILL 2 11	FILL 2 12	FILL 2 13
6	FILL 1 16	FILL 1 17	FILL 1 18	FILL 1 19
7	FILL 1 12	FILL 1 13	FILL 1 14	FILL 1 15
8	WSLD 112	WSLD 113	FILL 1 10	FILL 1 11
9	WSLD 18	WSLD 19	WSLD 110	WSLD 111
10	WSLD 14	WSLD 15	WSLD 16	WSLD 17
11	WSLD 10	WSLD 11	WSLD 12	WSLD 13
12	WSLD 210	WSLD 211	WSLD 212	WSLD 213
13	WSLD 26	WSLD 27	WSLD 28	WSLD 29
14	WSLD 22	WSLD 23	WSLD 24	WSLD 25
15	WSLD 312	WSLD 313	WSLD 20	WSLD 21
16	WSLD 38	WSLD 39	WSLD 310	WSLD 311
17	WSLD 34	WSLD 35	WSLD 36	WSLD 37
18	WSLD 30	WSLD 31	WSLD 32	WSLD 33
19				
20				
21				
22	MASK 18	MASK 19		
23	MASK 14	MASK 15	MASK 16	MASK 17
24	MASK 10	MASK 11	MASK 12	MASK 13
25	ME 14	ME 15	ME 16	ME 17
26	BKDS 1 18	BKDS 1 19	BKDS 1 110	BKDS 1 111
27	BDKS 1 14	BDKS 1 15	BDKS 1 16	BDKS 1 17
28	BDKS 1 10	BDKS 1 11	BDKS 1 12	BDKS 1 13
29	NRKS 1 18	NRKS 1 19	NRKS 1 110	NRKS 1 111
30	NRKS 1 14	NRKS 1 15	NRKS 1 16	NRKS 1 17
31	GND	GND	NRKS 1 12	NRKS 1 13
32	GND	GND	NRKS 1 10	NRKS 1 11

	A	B	C
1	GND	GND	GND
2	BDKS 2 15	BDKS 2 16	BDKS 2 17
3	BDKS 2 12	BDKS 2 13	BDKS 2 14
4	NRKS 2 111	BDKS 2 10	BDKS 2 11
5	NRKS 2 18	NRKS 2 19	NRKS 2 110
6	NRKS 2 15	NRKS 2 16	NRKS 2 17
7	NRKS 2 12	NRKS 2 13	NRKS 2 14
8	NTRS 111	NRKS 2 10	NRKS 2 11
9	NTRS 18	NTRS 19	NTRS 110
10	NTRS 15	NTRS 16	NTRS 17
11	NTRS 12	NTRS 13	NTRS 14
12	OTRS 111	NTRS 10	NTRS 11
13	OTRS 18	OTRS 19	OTRS 110
14	OTRS 15	OTRS 16	OTRS 17
15	OTRS 12	OTRS 13	OTRS 14
16		OTRS 10	OTRS 11
17			
18			
19			
20			
21			
22			
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24			
25			
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27			
28			
29			
30			
31			
32			

5
ME1 KEY

(13) MIX-4

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK10 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK2 (27.0M)
11	MEFL 2 18	MEFL 2 19		
12	MEFL 2 14	MEFL 2 15	MEFL 2 16	MEFL 2 17
13	MEFL 2 10	MEFL 2 11	MEFL 2 12	MEFL 2 13
14	MEFL 1 16	MEFL 1 17	MEFL 1 18	MEFL 1 19
15	MEFL 1 12	MEFL 1 13	MEFL 1 14	MEFL 1 15
16			MEFL 1 10	MEFL 1 11
17				
18				
19				
20				
21				
22	MEBG A 16	MEBG A 17	MEBG A 18	MEBG A 19
23	MEBG A 12	MEBG A 13	MEBG A 14	MEBG A 15
24	MEBG B 18	MEBG B 19	MEBG A 10	MEBG A 11
25	MEBG B 14	MEBG B 15	MEBG B 16	MEBG B 17
26	MEBG B 10	MEBG B 11	MEBG B 12	MEBG B 13
27	PGM 16	PGM 17	PGM 18	PGM 19
28	PGM 12	PGM 13	PGM 14	PGM 15
29			PGM 10	PGM 11
30				
31	GND	GND		
32	GND	GND		

	A	B	C	D
1				
2				
3	PVW 18	PVW 19		
4	PVW 14	PVW 15	PVW 16	PVW 17
5	PVW 10	PVW 11	PVW 12	PVW 13
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25	ME 14	ME 15	ME 16	ME 17
26	BKDS 1 18	BKDS 1 19	BKDS 1 110	BKDS 1 111
27	BDKS 1 14	BDKS 1 15	BDKS 1 16	BDKS 1 17
28	BDKS 1 10	BDKS 1 11	BDKS 1 12	BDKS 1 13
29	NRKS 1 18	NRKS 1 19	NRKS 1 110	NRKS 1 111
30	NRKS 1 14	NRKS 1 15	NRKS 1 16	NRKS 1 17
31	GND	GND	NRKS 1 12	NRKS 1 13
32	GND	GND	NRKS 1 10	NRKS 1 11

	A	B	C
1	GND	GND	GND
2	BDKS 2 15	BDKS 2 16	BDKS 2 17
3	BDKS 2 12	BDKS 2 13	BDKS 2 14
4	NRKS 2 111	BDKS 2 10	BDKS 2 11
5	NRKS 2 18	NRKS 2 19	NRKS 2 110
6	NRKS 2 15	NRKS 2 16	NRKS 2 17
7	NRKS 2 12	NRKS 2 13	NRKS 2 14
8	NTRS 111	NRKS 2 10	NRKS 2 11
9	NTRS 18	NTRS 19	NTRS 110
10	NTRS 15	NTRS 16	NTRS 17
11	NTRS 12	NTRS 13	NTRS 14
12	OTRS 111	NTRS 10	NTRS 11
13	OTRS 18	OTRS 19	OTRS 110
14	OTRS 15	OTRS 16	OTRS 17
15	OTRS 12	OTRS 13	OTRS 14
16		OTRS 10	OTRS 11
17			
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31			
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6
ME1 MIX

(14) KPC-1

X

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK11 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK3 (27.0M)
11	MEFL 2 28	MEFL 2 29		
12	MEFL 2 24	MEFL 2 25	MEFL 2 26	MEFL 2 27
13	MEFL 2 20	MEFL 2 21	MEFL 2 22	MEFL 2 23
14	MEFL 1 26	MEFL 1 27	MEFL 1 28	MEFL 1 29
15	MEFL 1 22	MEFL 1 23	MEFL 1 24	MEFL 1 25
16	KYSR 2 28	KYSR 2 29	MEFL 1 20	MEFL 1 21
17	KYSR 2 24	KYSR 2 25	KYSR 2 26	KYSR 2 27
18	KYSR 2 20	KYSR 2 21	KYSR 2 22	KYSR 2 23
19	KYSR 1 26	KYSR 1 27	KYSR 1 28	KYSR 1 29
20	KYSR 1 22	KYSR 1 23	KYSR 1 24	KYSR 1 25
21	MEBG A 28	MEBG A 29	KYSR 1 20	KYSR 1 21
22	MEBG A 24	MEBG A 25	MEBG A 26	MEBG A 27
23	MEBG A 20	MEBG A 21	MEBG A 22	MEBG A 23
24	MEBG B 26	MEBG B 27	MEBG B 28	MEBG B 29
25	MEBG B 22	MEBG B 23	MEBG B 24	MEBG B 25
26	CRKY 28	CRKY 29	MEBG B 20	MEBG B 21
27	CRKY 24	CRKY 25	CRKY 26	CRKY 27
28	CRKY 20	CRKY 21	CRKY 22	CRKY 23
29	BKGD A 26	BKGD A 27	BKGD A 28	BKGD A 29
30	BKGD A 22	BKGD A 23	BKGD A 24	BKGD A 25
31	GND	GND	BKGD A 20	BKGD A 21
32	GND	GND		

Y

	A	B	C	D
1	BKGD B 26	BKGD B 27	BKGD B 28	BKGD B 29
2	BKGD B 22	BKGD B 23	BKGD B 24	BKGD B 25
3	FILL 2 28	FILL 2 29	BKGD B 20	BKGD B 21
4	FILL 2 24	FILL 2 25	FILL 2 26	FILL 2 27
5	FILL 2 20	FILL 2 21	FILL 2 22	FILL 2 23
6	FILL 1 26	FILL 1 27	FILL 1 28	FILL 1 29
7	FILL 1 22	FILL 1 23	FILL 1 24	FILL 1 25
8	WSLD 112	WSLD 113	FILL 1 20	FILL 1 21
9	WSLD 18	WSLD 19	WSLD 110	WSLD 111
10	WSLD 14	WSLD 15	WSLD 16	WSLD 17
11	WSLD 10	WSLD 11	WSLD 12	WSLD 13
12	WSLD 210	WSLD 211	WSLD 212	WSLD 213
13	WSLD 26	WSLD 27	WSLD 28	WSLD 29
14	WSLD 22	WSLD 23	WSLD 24	WSLD 25
15	WSLD 312	WSLD 313	WSLD 20	WSLD 21
16	WSLD 38	WSLD 39	WSLD 310	WSLD 311
17	WSLD 34	WSLD 35	WSLD 36	WSLD 37
18	WSLD 30	WSLD 31	WSLD 32	WSLD 33
19				
20				
21				
22	MASK 28	MASK 29		
23	MASK 24	MASK 25	MASK 26	MASK 27
24	MASK 20	MASK 21	MASK 22	MASK 23
25	ME 24	ME 25	ME 26	ME 27
26	BKDS 1 28	BKDS 1 29	BKDS 1 210	BKDS 1 211
27	BDKS 1 24	BDKS 1 25	BDKS 1 26	BDKS 1 27
28	BDKS 1 20	BDKS 1 21	BDKS 1 22	BDKS 1 23
29	NRKS 1 28	NRKS 1 29	NRKS 1 210	NRKS 1 211
30	NRKS 1 24	NRKS 1 25	NRKS 1 26	NRKS 1 27
31	GND	GND	NRKS 1 22	NRKS 1 23
32	GND	GND	NRKS 1 20	NRKS 1 21

Z

	A	B	C
1	GND	GND	GND
2	BDKS 2 25	BDKS 2 26	BDKS 2 27
3	BDKS 2 22	BDKS 2 23	BDKS 2 24
4	NRKS 2 211	BDKS 2 20	BDKS 2 21
5	NRKS 2 28	NRKS 2 29	NRKS 2 210
6	NRKS 2 25	NRKS 2 26	NRKS 2 27
7	NRKS 2 22	NRKS 2 23	NRKS 2 24
8	NTRS 211	NRKS 2 20	NRKS 2 21
9	NTRS 28	NTRS 29	NTRS 210
10	NTRS 25	NTRS 26	NTRS 27
11	NTRS 22	NTRS 23	NTRS 24
12	OTRS 211	NTRS 20	NTRS 21
13	OTRS 28	OTRS 29	OTRS 210
14	OTRS 25	OTRS 26	OTRS 27
15	OTRS 22	OTRS 23	OTRS 24
16		OTRS 20	OTRS 21
17			
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29			
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7
ME2 KEY

(15) MIX-4

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK11 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK3 (27.0M)
11	MEFL 2 28	MEFL 2 29		
12	MEFL 2 24	MEFL 2 25	MEFL 2 26	MEFL 2 27
13	MEFL 2 20	MEFL 2 21	MEFL 2 22	MEFL 2 23
14	MEFL 1 26	MEFL 1 27	MEFL 1 28	MEFL 1 29
15	MEFL 1 22	MEFL 1 23	MEFL 1 24	MEFL 1 25
16			MEFL 1 20	MEFL 1 21
17				
18				
19				
20				
21				
22	MEBG A 26	MEBG A 27	MEBG A 28	MEBG A 29
23	MEBG A 22	MEBG A 23	MEBG A 24	MEBG A 25
24	MEBG B 28	MEBG B 29	MEBG A 20	MEBG A 21
25	MEBG B 24	MEBG B 25	MEBG B 26	MEBG B 27
26	MEBG B 20	MEBG B 21	MEBG B 22	MEBG B 23
27	PGM 26	PGM 27	PGM 28	PGM 29
28	PGM 22	PGM 23	PGM 24	PGM 25
29			PGM 20	PGM 21
30				
31	GND	GND		
32	GND	GND		

	A	B	C	D
1				
2				
3	PVW 28	PVW 29		
4	PVW 24	PVW 25	PVW 26	PVW 27
5	PVW 20	PVW 21	PVW 22	PVW 23
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25	ME 24	ME 25	ME 26	ME 27
26	BKDS 1 28	BKDS 1 29	BKDS 1 210	BKDS 1 211
27	BDKS 1 24	BDKS 1 25	BDKS 1 26	BDKS 1 27
28	BDKS 1 20	BDKS 1 21	BDKS 1 22	BDKS 1 23
29	NRKS 1 28	NRKS 1 29	NRKS 1 210	NRKS 1 211
30	NRKS 1 24	NRKS 1 25	NRKS 1 26	NRKS 1 27
31	GND	GND	NRKS 1 22	NRKS 1 23
32	GND	GND	NRKS 1 20	NRKS 1 21

	A	B	C
1	GND	GND	GND
2	BDKS 2 25	BDKS 2 26	BDKS 2 27
3	BDKS 2 22	BDKS 2 23	BDKS 2 24
4	NRKS 2 211	BDKS 2 20	BDKS 2 21
5	NRKS 2 28	NRKS 2 29	NRKS 2 210
6	NRKS 2 25	NRKS 2 26	NRKS 2 27
7	NRKS 2 22	NRKS 2 23	NRKS 2 24
8	NTRS 211	NRKS 2 20	NRKS 2 21
9	NTRS 28	NTRS 29	NTRS 210
10	NTRS 25	NTRS 26	NTRS 27
11	NTRS 22	NTRS 23	NTRS 24
12	OTRS 211	NTRS 20	NTRS 21
13	OTRS 28	OTRS 29	OTRS 210
14	OTRS 25	OTRS 26	OTRS 27
15	OTRS 22	OTRS 23	OTRS 24
16		OTRS 20	OTRS 21
17			
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8
ME2 MIX

MB-245 (2/5)
1-636-516-12
DVS-8000

MB-245 (2/5) MOTHER BOARD

S/N; 10061 and higher

1

2

3

4

5

(12)

KPC-1

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK10 (13.5M)
10	GND	GND	GND	CK2 (27.0M)
11	MEFL 2 18	MEFL 2 19		
12	MEFL 2 14	MEFL 2 15	MEFL 2 16	MEFL 2 17
13	MEFL 2 10	MEFL 2 11	MEFL 2 12	MEFL 2 13
14	MEFL 1 16	MEFL 1 17	MEFL 1 18	MEFL 1 19
15	MEFL 1 12	MEFL 1 13	MEFL 1 14	MEFL 1 15
16	KYSR 2 18	KYSR 2 19	MEFL 1 10	MEFL 1 11
17	KYSR 2 14	KYSR 2 15	KYSR 2 16	KYSR 2 17
18	KYSR 2 10	KYSR 2 11	KYSR 2 12	KYSR 2 13
19	KYSR 1 16	KYSR 1 17	KYSR 1 18	KYSR 1 19
20	KYSR 1 12	KYSR 1 13	KYSR 1 14	KYSR 1 15
21	MEBG A 18	MEBG A 19	KYSR 1 10	KYSR 1 11
22	MEBG A 14	MEBG A 15	MEBG A 16	MEBG A 17
23	MEBG A 10	MEBG A 11	MEBG A 12	MEBG A 13
24	MEBG B 16	MEBG B 17	MEBG B 18	MEBG B 19
25	MEBG B 12	MEBG B 13	MEBG B 14	MEBG B 15
26	CRKY 18	CRKY 19	MEBG B 10	MEBG B 11
27	CRKY 14	CRKY 15	CRKY 16	CRKY 17
28	CRKY 10	CRKY 11	CRKY 12	CRKY 13
29	BKGD A 16	BKGD A 17	BKGD A 18	BKGD A 19
30	BKGD A 12	BKGD A 13	BKGD A 14	BKGD A 15
31	GND	GND	BKGD A 10	BKGD A 11
32	GND	GND		

	A	B	C	D
1	BKGD B 16	BKGD B 17	BKGD B 18	BKGD B 19
2	BKGD B 12	BKGD B 13	BKGD B 14	BKGD B 15
3	FILL 2 18	FILL 2 19	BKGD B 10	BKGD B 11
4	FILL 2 14	FILL 2 15	FILL 2 16	FILL 2 17
5	FILL 2 10	FILL 2 11	FILL 2 12	FILL 2 13
6	FILL 1 16	FILL 1 17	FILL 1 18	FILL 1 19
7	FILL 1 12	FILL 1 13	FILL 1 14	FILL 1 15
8	WSLD 112	WSLD 113	FILL 1 10	FILL 1 11
9	WSLD 18	WSLD 19	WSLD 110	WSLD 111
10	WSLD 14	WSLD 15	WSLD 16	WSLD 17
11	WSLD 10	WSLD 11	WSLD 12	WSLD 13
12	WSLD 210	WSLD 211	WSLD 212	WSLD 213
13	WSLD 26	WSLD 27	WSLD 28	WSLD 29
14	WSLD 22	WSLD 23	WSLD 24	WSLD 25
15	WSLD 312	WSLD 313	WSLD 20	WSLD 21
16	WSLD 38	WSLD 39	WSLD 310	WSLD 311
17	WSLD 34	WSLD 35	WSLD 36	WSLD 37
18	WSLD 30	WSLD 31	WSLD 32	WSLD 33
19				
20				
21				
22	MASK 18	MASK 19		
23	MASK 14	MASK 15	MASK 16	MASK 17
24	MASK 10	MASK 11	MASK 12	MASK 13
25	ME 14	ME 15	ME 16	ME 17
26	BKDS 1 18	BKDS 1 19	BKDS 1 110	BKDS 1 111
27	BDKS 1 14	BDKS 1 15	BDKS 1 16	BDKS 1 17
28	BDKS 1 10	BDKS 1 11	BDKS 1 12	BDKS 1 13
29	NRKS 1 18	NRKS 1 19	NRKS 1 110	NRKS 1 111
30	NRKS 1 14	NRKS 1 15	NRKS 1 16	NRKS 1 17
31	GND	GND	NRKS 1 12	NRKS 1 13
32	GND	GND	NRKS 1 10	NRKS 1 11

	A	B	C
1	GND	GND	GND
2	BDKS 2 15	BDKS 2 16	BDKS 2 17
3	BDKS 2 12	BDKS 2 13	BDKS 2 14
4	NRKS 2 111	BDKS 2 10	BDKS 2 11
5	NRKS 2 18	NRKS 2 19	NRKS 2 110
6	NRKS 2 15	NRKS 2 16	NRKS 2 17
7	NRKS 2 12	NRKS 2 13	NRKS 2 14
8	NTRS 111	NRKS 2 10	NRKS 2 11
9	NTRS 18	NTRS 19	NTRS 110
10	NTRS 15	NTRS 16	NTRS 17
11	NTRS 12	NTRS 13	NTRS 14
12	OTRS 111	NTRS 10	NTRS 11
13	OTRS 18	OTRS 19	OTRS 110
14	OTRS 15	OTRS 16	OTRS 17
15	OTRS 12	OTRS 13	OTRS 14
16		OTRS 10	OTRS 11
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29	GND	GND	GND
30	GND	GND	GND
31	GND	GND	GND
32	GND	GND	GND

5

ME1 KEY

(13)

MIX-4

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK10 (13.5M)
10	GND	GND	GND	CK2 (27.0M)
11	MEFL 2 18	MEFL 2 19		
12	MEFL 2 14	MEFL 2 15	MEFL 2 16	MEFL 2 17
13	MEFL 2 10	MEFL 2 11	MEFL 2 12	MEFL 2 13
14	MEFL 1 16	MEFL 1 17	MEFL 1 18	MEFL 1 19
15	MEFL 1 12	MEFL 1 13	MEFL 1 14	MEFL 1 15
16			MEFL 1 10	MEFL 1 11
17				
18				
19				
20				
21				
22	MEBG A 16	MEBG A 17	MEBG A 18	MEBG A 19
23	MEBG A 12	MEBG A 13	MEBG A 14	MEBG A 15
24	MEBG B 18	MEBG B 19	MEBG A 10	MEBG A 11
25	MEBG B 14	MEBG B 15	MEBG B 16	MEBG B 17
26	MEBG B 10	MEBG B 11	MEBG B 12	MEBG B 13
27	PGM 16	PGM 17	PGM 18	PGM 19
28	PGM 12	PGM 13	PGM 14	PGM 15
29			PGM 10	PGM 11
30				
31	GND	GND		
32	GND	GND		

X

	A	B	C	D
1				
2				
3	PVW 18	PVW 19		
4	PVW 14	PVW 15	PVW 16	PVW 17
5	PVW 10	PVW 11	PVW 12	PVW 13
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25	ME 14	ME 15	ME 16	ME 17
26	BKDS 1 18	BKDS 1 19	BKDS 1 110	BKDS 1 111
27	BDKS 1 14	BDKS 1 15	BDKS 1 16	BDKS 1 17
28	BDKS 1 10	BDKS 1 11	BDKS 1 12	BDKS 1 13
29	NRKS 1 18	NRKS 1 19	NRKS 1 110	NRKS 1 111
30	NRKS 1 14	NRKS 1 15	NRKS 1 16	NRKS 1 17
31	GND	GND	NRKS 1 12	NRKS 1 13
32	GND	GND	NRKS 1 10	NRKS 1 11

Y

	A	B	C
1	GND	GND	GND
2	BDKS 2 15	BDKS 2 16	BDKS 2 17
3	BDKS 2 12	BDKS 2 13	BDKS 2 14
4	NRKS 2 111	BDKS 2 10	BDKS 2 11
5	NRKS 2 18	NRKS 2 19	NRKS 2 110
6	NRKS 2 15	NRKS 2 16	NRKS 2 17
7	NRKS 2 12	NRKS 2 13	NRKS 2 14
8	NTRS 111	NRKS 2 10	NRKS 2 11
9	NTRS 18	NTRS 19	NTRS 110
10	NTRS 15	NTRS 16	NTRS 17
11	NTRS 12	NTRS 13	NTRS 14
12	OTRS 111	NTRS 10	NTRS 11
13	OTRS 18	OTRS 19	OTRS 110
14	OTRS 15	OTRS 16	OTRS 17
15	OTRS 12	OTRS 13	OTRS 14
16		OTRS 10	OTRS 11
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29	GND	GND	GND
30	GND	GND	GND
31	GND	GND	GND
32	GND	GND	GND

Z

6

ME1 MIX

(14)

KPC-1

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK11 (13.5M)
10	GND	GND	GND	CK3 (27.0M)
11	MEFL 2 28	MEFL 2 29		
12	MEFL 2 24	MEFL 2 25	MEFL 2 26	MEFL 2 27
13	MEFL 2 20	MEFL 2 21	MEFL 2 22	MEFL 2 23
14	MEFL 1 26	MEFL 1 27	MEFL 1 28	MEFL 1 29
15	MEFL 1 22	MEFL 1 23	MEFL 1 24	MEFL 1 25
16	KYSR 2 28	KYSR 2 29	MEFL 1 20	MEFL 1 21
17	KYSR 2 24	KYSR 2 25	KYSR 2 26	KYSR 2 27
18	KYSR 2 20	KYSR 2 21	KYSR 2 22	KYSR 2 23
19	KYSR 1 26	KYSR 1 27	KYSR 1 28	KYSR 1 29
20	KYSR 1 22	KYSR 1 23	KYSR 1 24	KYSR 1 25
21	MEBG A 28	MEBG A 29	KYSR 1 20	KYSR 1 21
22	MEBG A 24	MEBG A 25	MEBG A 26	MEBG A 27
23	MEBG A 20	MEBG A 21	MEBG A 22	MEBG A 23
24	MEBG B 26	MEBG B 27	MEBG B 28	MEBG B 29
25	MEBG B 22	MEBG B 23	MEBG B 24	MEBG B 25
26	CRKY 28	CRKY 29	MEBG B 20	MEBG B 21
27	CRKY 24	CRKY 25	CRKY 26	CRKY 27
28	CRKY 20	CRKY 21	CRKY 22	CRKY 23
29	BKGD A 26	BKGD A 27	BKGD A 28	BKGD A 29
30	BKGD A 22	BKGD A 23	BKGD A 24	BKGD A 25
31	GND	GND	BKGD A 20	BKGD A 21
32	GND	GND		

	A	B	C	D
1	BKGD B 26	BKGD B 27	BKGD B 28	BKGD B 29
2	BKGD B 22	BKGD B 23	BKGD B 24	BKGD B 25
3	FILL 2 28	FILL 2 29	BKGD B 20	BKGD B 21
4	FILL 2 24	FILL 2 25	FILL 2 26	FILL 2 27
5	FILL 2 20	FILL 2 21	FILL 2 22	FILL 2 23
6	FILL 1 26	FILL 1 27	FILL 1 28	FILL 1 29
7	FILL 1 22	FILL 1 23	FILL 1 24	FILL 1 25
8	WSLD 112	WSLD 113	FILL 1 20	FILL 1 21
9	WSLD 18	WSLD 19	WSLD 110	WSLD 111
10	WSLD 14	WSLD 15	WSLD 16	WSLD 17
11	WSLD 10	WSLD 11	WSLD 12	WSLD 13
12	WSLD 210	WSLD 211	WSLD 212	WSLD 213
13	WSLD 26	WSLD 27	WSLD 28	WSLD 29
14	WSLD 22	WSLD 23	WSLD 24	WSLD 25
15	WSLD 312	WSLD 313	WSLD 20	WSLD 21
16	WSLD 38	WSLD 39	WSLD 310	WSLD 311
17	WSLD 34	WSLD 35	WSLD 36	WSLD 37
18	WSLD 30	WSLD 31	WSLD 32	WSLD 33
19				
20				
21				
22	MASK 28	MASK 29		
23	MASK 24	MASK 25	MASK 26	MASK 27
24	MASK 20	MASK 21	MASK 22	MASK 23
25	ME 24	ME 25	ME 26	ME 27
26	BKDS 1 28	BKDS 1 29	BKDS 1 210	BKDS 1 211
27	BDKS 1 24	BDKS 1 25	BDKS 1 26	BDKS 1 27
28	BDKS 1 20	BDKS 1 21	BDKS 1 22	BDKS 1 23
29	NRKS 1 28	NRKS 1 29	NRKS 1 210	NRKS 1 211
30	NRKS 1 24	NRKS 1 25	NRKS 1 26	NRKS 1 27
31	GND	GND	NRKS 1 22	NRKS 1 23
32	GND	GND	NRKS 1 20	NRKS 1 21

	A	B	C
1	GND	GND	GND
2	BDKS 2 25	BDKS 2 26	BDKS 2 27
3	BDKS 2 22	BDKS 2 23	BDKS 2 24
4	NRKS 2 211	BDKS 2 20	BDKS 2 21
5	NRKS 2 28	NRKS 2 29	NRKS 2 210
6	NRKS 2 25	NRKS 2 26	NRKS 2 27
7	NRKS 2 22	NRKS 2 23	NRKS 2 24
8	NTRS 211	NRKS 2 20	NRKS 2 21
9	NTRS 28	NTRS 29	NTRS 210
10	NTRS 25	NTRS 26	NTRS 27
11	NTRS 22	NTRS 23	NTRS 24
12	OTRS 211	NTRS 20	NTRS 21
13	OTRS 28	OTRS 29	OTRS 210
14	OTRS 25	OTRS 26	OTRS 27
15	OTRS 22	OTRS 23	OTRS 24
16		OTRS 20	OTRS 21
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29	GND	GND	GND
30	GND	GND	GND
31	GND	GND	GND
32	GND	GND	GND

7

ME2 KEY

(15)

MIX-4

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK11 (13.5M)
10	GND	GND	GND	CK3 (27.0M)
11	MEFL 2 28	MEFL 2 29		
12	MEFL 2 24	MEFL 2 25	MEFL 2 26	MEFL 2 27
13	MEFL 2 20	MEFL 2 21	MEFL 2 22	MEFL 2 23
14	MEFL 1 26	MEFL 1 27	MEFL 1 28	MEFL 1 29
15	MEFL 1 22	MEFL 1 23	MEFL 1 24	MEFL 1 25
16			MEFL 1 20	MEFL 1 21
17				
18				
19				
20				
21				
22	MEBG A 26	MEBG A 27	MEBG A 28	MEBG A 29
23	MEBG A 22	MEBG A 23	MEBG A 24	MEBG A 25
24	MEBG B 28	MEBG B 29	MEBG A 20	MEBG A 21
25	MEBG B 24	MEBG B 25	MEBG B 26	MEBG B 27
26	MEBG B 20	MEBG B 21	MEBG B 22	MEBG B 23
27	PGM 26	PGM 27	PGM 28	PGM 29
28	PGM 22	PGM 23	PGM 24	PGM 25
29			PGM 20	PGM 21
30				
31	GND	GND		
32	GND	GND		

	A	B	C	D
1				
2				
3	PVW 28	PVW 29		
4	PVW 24	PVW 25	PVW 26	PVW 27
5	PVW 20	PVW 21	PVW 22	PVW 23
6				
7				
8				
9				
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11				
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18				
19				
20				
21				
22				
23				
24				
25	ME 24	ME 25	ME 26	ME 27
26	BKDS 1 28	BKDS 1 29	BKDS 1 210	BKDS 1 211
27	BDKS 1 24	BDKS 1 25	BDKS 1 26	BDKS 1 27
28	BDKS 1 20	BDKS 1 21	BDKS 1 22	BDKS 1 23
29	NRKS 1 28	NRKS 1 29	NRKS 1 210	NRKS 1 211
30	NRKS 1 24	NRKS 1 25	NRKS 1 26	NRKS 1 27
31	GND	GND	NRKS 1 22	NRKS 1 23
32	GND	GND	NRKS 1 20	NRKS 1 21

	A	B	C
1	GND	GND	GND
2	BDKS 2 25	BDKS 2 26	BDKS 2 27
3	BDKS 2 22	BDKS 2 23	BDKS 2 24
4	NRKS 2 211	BDKS 2 20	BDKS 2 21
5	NRKS 2 28	NRKS 2 29	NRKS 2 210
6	NRKS 2 25	NRKS 2 26	NRKS 2 27
7	NRKS 2 22	NRKS 2 23	NRKS 2 24
8	NTRS 211	NRKS 2 20	NRKS 2 21
9	NTRS 28	NTRS 29	NTRS 210
10	NTRS 25	NTRS 26	NTRS 27
11	NTRS 22	NTRS 23	NTRS 24
12	OTRS 211	NTRS 20	NTRS 21
13	OTRS 28	OTRS 29	OTRS 210
14	OTRS 25	OTRS 26	OTRS 27
15	OTRS 22	OTRS 23	OTRS 24
16		OTRS 20	OTRS 21
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29	GND	GND	GND
30	GND	GND	GND
31	GND	GND	GND
32	GND	GND	GND

8

ME2 MIX

MB-245 (2/5)
1-636-516-13
DVS-8000

B-SYX121-MB-D1#23

A　B　C　D　E　F　G　H

MB-245 (3/5) MOTHER BOARD

S/N; 10001 through 10060

(16) MIX-6

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK12 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK4 (27.0M)
11				
12				
13				
14				
15				
16	KYSR D8	KYSR D9		
17	KYSR D4	KYSR D5	KYSR D6	KYSR D7
18	KYSR D0	KYSR D1	KYSR D2	KYSR D3
19				
20				
21				
22				
23				
24				
25				
26	BKGD A D8	BKGD A D9		
27	BKGD A D4	BKGD A D5	BKGD A D6	BKGD A D7
28	BKGD A D0	BKGD A D1	BKGD A D2	BKGD A D3
29	BKGD B D6	BKGD B D7	BKGD B D8	BKGD B D9
30	BKGD B D2	BKGD B D3	BKGD B D4	BKGD B D5
31	GND	GND	BKGD B D0	BKGD B D1
32	GND	GND		

	A	B	C	D
1	FILL D6	FILL D7	FILL D8	FILL D9
2	FILL D2	FILL D3	FILL D4	FILL D5
3	PVW P8	PVW P9	FILL D0	FILL D1
4	PVW P4	PVW P5	PVW P6	PVW P7
5	PVW P0	PVW P1	PVW P2	PVW P3
6	PGM P6	PGM P7	PGM P8	PGM P9
7	PGM P2	PGM P3	PGM P4	PGM P5
8	WSLD 112	WSLD 113	PGM P0	PGM P1
9	WSLD 18	WSLD 19	WSLD 110	WSLD 111
10	WSLD 14	WSLD 15	WSLD 16	WSLD 17
11	WSLD 10	WSLD 11	WSLD 12	WSLD 13
12	WSLD 210	WSLD 211	WSLD 212	WSLD 213
13	WSLD 26	WSLD 27	WSLD 28	WSLD 29
14	WSLD 22	WSLD 23	WSLD 24	WSLD 25
15	WSLD 312	WSLD 313	WSLD 20	WSLD 21
16	WSLD 38	WSLD 39	WSLD 310	WSLD 311
17	WSLD 34	WSLD 35	WSLD 36	WSLD 37
18	WSLD 30	WSLD 31	WSLD 32	WSLD 33
19	CLFD 6	CLFD 7	CLFD 8	CLFD 9
20	CLFD 2	CLFD 3	CLFD 4	CLFD 5
21			CLFD 0	CLFD 1
22	MASK 38	MASK 39		
23	MASK 34	MASK 35	MASK 36	MASK 37
24	MASK 30	MASK 31	MASK 32	MASK 33
25				
26				
27				
28				
29				
30				
31	GND	GND		
32	GND	GND		

	A	B	C
1			
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11			
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31			
32			

9 PGM/PST

(17) OUT-1

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK12 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK4 (27.0M)
11	AUX1 8	AUX1 9		
12	AUX1 4	AUX1 5	AUX1 6	AUX1 7
13	AUX1 0	AUX1 1	AUX1 2	AUX1 3
14	AUX4 6	AUX4 7	AUX4 8	AUX4 9
15	AUX4 2	AUX4 3	AUX4 4	AUX4 5
16	PVW 8	PVW 9	AUX4 0	AUX4 1
17	PVW 4	PVW 5	PVW 6	PVW 7
18	PVW 0	PVW 1	PVW 2	PVW 3
19	AUX2 6	AUX2 7	AUX2 8	AUX2 9
20	AUX2 2	AUX2 3	AUX2 4	AUX2 5
21	AUX3 8	AUX3 9	AUX2 0	AUX2 1
22	AUX3 4	AUX3 5	AUX3 6	AUX3 7
23	AUX3 0	AUX3 1	AUX3 2	AUX3 3
24	PGM 16	PGM 17	PGM 18	PGM 19
25	PGM 12	PGM 13	PGM 14	PGM 15
26	PGM 28	PGM 29	PGM 10	PGM 11
27	PGM 24	PGM 25	PGM 26	PGM 27
28	PGM 20	PGM 21	PGM 22	PGM 23
29	PVW 16	PVW 17	PVW 18	PVW 19
30	PVW 12	PVW 13	PVW 14	PVW 15
31	GND	GND	PVW 10	PVW 11
32	GND	GND		

	A	B	C	D
1	PVW 26	PVW 27	PVW 28	PVW 29
2	PVW 22	PVW 23	PVW 24	PVW 25
3	PVW P8	PVW P9	PVW 20	PVW 21
4	PVW P4	PVW P5	PVW P6	PVW P7
5	PVW P0	PVW P1	PVW P2	PVW P3
6	PGM P6	PGM P7	PGM P8	PGM P9
7	PGM P2	PGM P3	PGM P4	PGM P5
8	CLFD 8	CLFD 9	PGM P0	PGM P1
9	CLFD 4	CLFD 5	CLFD 6	CLFD 7
10	CLFD 0	CLFD 1	CLFD 2	CLFD 3
11				
12				
13	CRKV 28	CRKV 29		
14	CRKV 24	CRKV 25	CRKV 26	CRKV 27
15	CRKV 20	CRKV 21	CRKV 22	CRKV 23
16	CRKV 16	CRKV 17	CRKV 18	CRKV 19
17	CRKV 12	CRKV 13	CRKV 14	CRKV 15
18	BB 8	BB 9	CRKV 10	CRKV 11
19	BB 6	BB 7		
20	BB 4	BB 5		
21	BB 2	BB 3		
22	BB 0	BB 1		
23	PVW OUT 8	PVW OUT 9		
24	PVW OUT 6	PVW OUT 7		
25	PVW OUT 4	PVW OUT 5		
26	PVW OUT 2	PVW OUT 3		
27	PVW OUT 0	PVW OUT 1		
28				
29				
30				
31	GND	GND		
32	GND	GND		

	A	B	C
1			
2		AUX 2	
3			
4		AUX 1	
5			
6		AUX 3	
7			
8		AUX 4	
9			
10		ED PVW	
11			
12		ED PVW	
13			
14		CLFD	
15			
16		PGM	
17			
18		PGM	
19			
20		PGM	
21			
22		PGM	
23			
24		DSK PVW	
25			
26		ME2 PVW	
27			
28		ME1 PVW	
29			
30		ME2 PGM	
31			
32		ME1 PGM	

10 OUTPUT

(18) CRK-4 (D-1) CRK-5 (D-2)

X

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK13 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK5 (27.0M)
11	KYSR 2 18	KYSR 2 19		
12	KYSR 2 14	KYSR 2 15	KYSR 2 16	KYSR 2 17
13	KYSR 2 10	KYSR 2 11	KYSR 2 12	KYSR 2 13
14	KYSR 1 16	KYSR 1 17	KYSR 1 18	KYSR 1 19
15	KYSR 1 12	KYSR 1 13	KYSR 1 14	KYSR 1 15
16			KYSR 1 10	KYSR 1 11
17				
18				
19				
20				
21				
22				
23				
24	BKGD R8	BKGD R9	BKGD R10	BKGD R11
25	BKGD R4	BLGD R5	BKGD R6	BKGD R7
26	BKGD R0	BKGD R1	BKGD R2	BKGD R3
27	BKGD G8	BKGD G9	BKGD G10	BKGD G11
28	BKGD G4	BKGD G5	BKGD G6	BKGD G7
29	BKGD G0	BKGD G1	BKGD G2	BKGD G3
30	BKGD B8	BKGD B9	BKGD B10	BKGD B11
31	GND	GND	BKGD B6	BKGD B7
32	GND	GND	BKGD B4	BKGD B5

Y

	A	B	C	D
1	BKGD B0	BKGD B1	BKGD B2	BKGD B3
2	FRGD R8	FRGD R9	FRGD R10	FRGD R11
3	FRGD R4	FRGD R5	FRGD R6	FRGD R7
4	FRGD R0	FRGD R1	FRGD R2	FRGD R3
5	FRGD G8	FRGD G9	FRGD G10	FRGD G11
6	FRGD G4	FRGD G5	FRGD G6	FRGD G7
7	FRGD G0	FRGD G1	FRGD G2	FRGD G3
8	FRGD B8	FRGD B9	FRGD B10	FRGD B11
9	FRGD B4	FRGD B5	FRGD B6	FRGD B7
10	FRGD B0	FRGD B1	FRGD B2	FRGD B3
11	CRK 6	CRK 7	CRK 8	CRK 9
12	CRK 2	CRK 3	CRK 4	CRK 5
13	CRKV 18	CRKV 19	CRK 0	CRK 1
14	CRKV 14	CRKV 15	CRKV 16	CRKV 17
15	CRKV 10	CRKV 11	CRKV 12	CRKV 13
16	CRKY 16	CRKY 17	CRKY 18	CRKY 19
17	CRKY 12	CRKY 13	CRKY 14	CRKY 15
18	CKFL 18	CKFL 19	CRKY 10	CRKY 11
19	CKFL 14	CKFL 15	CKFL 16	CKFL 17
20	CKFL 10	CKFL 11	CKFL 12	CKFL 13
21	CKMSK 16	CKMSK 17	CKMSK 18	CKMSK 19
22	CKMSK 12	CKMSK 13	CKMSK 14	CKMSK 15
23			CKMSK 10	CKMSK 11
24				
25				
26				
27				
28				
29				
30				
31	GND	GND		
32	GND	GND		

Z

	A	B	C
1			
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11 CHROMA KEY

(19) CRK-4 (D-1) ADC-5 (D-2)

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK13 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK5 (27.0M)
11				
12				
13				
14				
15				
16				
17				
18				
19	KYSR 2 26	KYSR 2 27	KYSR 2 28	KYSR 2 29
20	KYSR 2 22	KYSR 2 23	KYSR 2 24	KYSR 2 25
21	KYSR 1 28	KYSR 1 29	KYSR 2 20	KYSR 2 21
22	KYSR 1 24	KYSR 1 25.	KYSR 1 26	KYSR 1 27
23	KYSR 1 20	KYSR 1 21	KYSR 1 22	KYSR 1 23
24	BKGD Y8	BKGD Y9	BKGD Y10	BKGD Y11
25	BKGD Y4	BKGD Y5	BKGD Y6	BKGD Y7
26	BKGD Y0	BKGD Y1	BKGD Y2	BKGD Y3
27	BKGD I8	BKGD I9	BKGD I10	BKGD I11
28	BKGD I4	BKGD I5	BKGD I6	BKGD I7
29	BKGD I0	BKGD I1	BKGD I2	BKGD I3
30	BKGD Q8	BKGD Q9	BKGD Q10	BKGD Q11
31	GND	GND	BKGD Q6	BKGD Q7
32	GND	GND	BKGD Q4	BKGD Q5

	A	B	C	D
1	BKGD Q0	BKGD Q1	BKGD Q2	BKGD Q3
2	FRGD Y8	FRGD Y9	FRGD Y10	FRGD Y11
3	FRGD Y4	FRGD Y5	FRGD Y6	FRGD Y7
4	FRGD Y0	FRGD Y1	FRGD Y2	FRGD Y3
5	FRGD V8	FRGD V9	FRGD V10	FRGD V11
6	FRGD V4	FRGD V5	FRGD V6	FRGD V7
7	FRGD V0	FRGD V1	FRGD V2	FRGD V3
8	FRGD U8	FRGD U9	FRGD U10	FRGD U11
9	FRGD U4	FRGD U5	FRGD U6	FRGD U7
10	FRGD U0	FRGD U1	FRGD U2	FRGD U3
11	CRK 6	CRK 7	CRK 8	CRK 9
12	CRK 2	CRK 3	CRK 4	CRK 5
13	CRKV 28	CRKV 29	CRK 0	CRK 1
14	CRKV 24	CRKV 25	CRKV 26	CRKV 27
15	CRKV 20	CRKV 21	CRKV 22	CRKV 23
16	CRKY 26	CRKY 27	CRKY 28	CRKY 29
17	CRKY 22	CRKY 23	CRKY 24	CRKY 25
18	CKFL 28	CKFL 29	CRKY 20	CRKY 21
19	CKFL 24	CKFL 25	CKFL 26	CKFL 27
20	CKFL 20	CKFL 21	CKFL 22	CKFL 23
21	CKMSK 26	CKMSK 27	CKMSK 28	CKMSK 29
22	CKMSK 22	CKMSK 23	CKMSK 24	CKMSK 25
23			CKMSK 20	CKMSK 21
24				
25				
26				
27				
28				
29				
30				
31	GND	GND		
32	GND	GND		

	A	B	C
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18		SYNC 2	
19			
20		R-Y/R 2	
21			
22		B-Y/B 2	
23			
24		Y/G 2	
25			
26		SYNC 1	
27			
28		R-Y/R 1	
29			
30		B-Y/B 1	
31			
32		Y/G 1	

12 AD

MB-245 (3/5)
1-636-516-12
DVS-8000

MB-245 (4/5) MOTHER BOARD

S/N; 10001 through 10060

(1A)

MAT-1

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK14 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK6 (27.0M)
11	AUX1 6	AUX1 7	AUX1 8	AUX1 9
12	AUX1 2	AUX1 3	AUX1 4	AUX1 5
13	AUX4 8	AUX4 9	AUX1 0	AUX1 1
14	AUX4 4	AUX4 5	AUX4 6	AUX4 7
15	AUX4 0	AUX4 1	AUX4 2	AUX4 3
16	PVW 6	PVW 7	PVW 8	PVW 9
17	PVW 2	PVW 3	PVW 4	PVW 5
18	AUX2 8	AUX2 9	PVW 0	PVW 1
19	AUX2 4	AUX2 5	AUX2 6	AUX2 7
20	AUX2 0	AUX2 1	AUX2 2	AUX2 3
21	AUX3 6	AUX3 7	AUX3 8	AUX3 9
22	AUX3 2	AUX3 3	AUX3 4	AUX3 5
23	PGM 18	PGM 19	AUX3 0	AUX3 1
24	PGM 14	PGM 15	PGM 16	PGM 17
25	PGM 10	PGM 11	PGM 12	PGM 13
26	PGM 26	PGM 27	PGM 28	PGM 29
27	PGM 22	PGM 23	PGM 24	PGM 25
28	BKGD A D8	BKGD A D9	PGM 20	PGM 21
29	BKGD A D4	BKGD A D5	BKGD A D6	BKGD A D7
30	BKGD A D0	BKGD A D1	BKGD A D2	BKGD A D3
31	GND	GND	BKGD B D8	BKGD B D9
32	GND	GND	BKGD B D6	BKGD B D7

	A	B	C	D
1	BKGD B D2	BKGD B D3	BKGD B D4	BKGD B D5
2	FILL D8	FILL D9	BKGD B D0	BKGD B D1
3	FILL D4	FILL D5	FILL D6	FILL D7
4	FILL D0	FILL D1	FILL D2	FILL D3
5	KYSR 2 16	KYSR 2 17	KYSR 2 18	KYSR 2 19
6	KYSR 2 12	KYSR 2 13	KYSR 2 14	KYSR 2 15
7	KYSR 1 18	KYSR 1 19	KYSR 2 10	KYSR 2 11
8	KYSR 1 14	KYSR 1 15	KYSR 1 16	KYSR 1 17
9	KYSR 1 10	KYSR 1 11	KYSR 1 12	KYSR 1 13
10	KYSR D6	KYSR D7	KYSR D8	KYSR D9
11	KYSR D2	KYSR D3	KYSR D4	KYSR D5
12	KYSR 2 28	KYSR 2 29	KYSR D0	KYSR D1
13	KYSR 2 24	KYSR 2 25	KYSR 2 26	KYSR 2 27
14	KYSR 2 20	KYSR 2 21	KYSR 2 22	KYSR 2 23
15	KYSR 1 26	KYSR 1 27	KYSR 1 28	KYSR 1 29
16	KYSR 1 22	KYSR 1 23	KYSR 1 24	KYSR 1 25
17	BKGD A 28	BKGD A 29	KYSR 1 20	KYSR 1 21
18	BKGD A 24	BKGD A 25	BKGD A 26	BKGD A 27
19	BKGD A 20	BKGD A 21	BKGD A 22	BKGD A 23
20	BKGD B 26	BKGD B 27	BKGD B 28	BKGD B 29
21	BKGD B 22	BKGD B 23	BKGD B 24	BKGD B 25
22	FILL 2 28	FILL 2 29	BKGD B 20	BKGD B 21
23	FILL 2 24	FILL 2 25	FILL 2 26	FILL 2 27
24	FILL 2 20	FILL 2 21	FILL 2 22	FILL 2 23
25	FILL 1 26	FILL 1 27	FILL 1 28	FILL 1 29
26	FILL 1 22	FILL 1 23	FILL 1 24	FILL 1 25
27	BKGD A 18	BKGD A 19	FILL 1 20	FILL 1 21
28	BKGD A 14	BKGD A 15	BKGD A 16	BKGD A 17
29	BKGD A 10	BKGD A 11	BKGD A 12	BKGD A 13
30	BKGD B 16	BKGD B 17	BKGD B 18	BKGD B 19
31	GND	GND	BKGD B 14	BKGD B 15
32	GND	GND	BKGD B 12	BKGD B 13

	A	B	C
1	GND	GND	GND
2	FILL 2 19	BKGD B 10	BKGD B 11
3	FILL 2 16	FILL 2 17	FILL 2 18
4	FILL 2 13	FILL 2 14	FILL 2 15
5	FILL 2 10	FILL 2 11	FILL 2 12
6	FILL 1 17	FILL 1 18	FILL 1 19
7	FILL 1 14	FILL 1 15	FILL 1 16
8	FILL 1 11	FILL 1 12	FILL 1 13
9	MASK 38	MASK 39	FILL 1 10
10	MASK 35	MASK 36	MASK 37
11	MASK 32	MASK 33	MASK 34
12	MASK 29	MASK 30	MASK 31
13	MASK 26	MASK 27	MASK 28
14	MASK 23	MASK 24	MASK 25
15	MASK 20	MASK 21	MASK 22
16	MASK 17	MASK 18	MASK 19
17	MASK 14	MASK 15	MASK 16
18	MASK 11	MASK 12	MASK 13
19	CKFL 18	CKFL 19	MASK 10
20	CKFL 15	CKFL 16	CKFL 17
21	CKFL 12	CKFL 13	CKFL 14
22	CKFL 29	CKFL 10	CKFL 11
23	CKFL 26	CKFL 27	CKFL 28
24	CKFL 23	CKFL 24	CKFL 25
25	CKFL 20	CKFL 21	CKFL 22
26	MY 17	MY 18	MY 19
27	MY 14	MY 15	MY 16
28	MY 11	MY 12	MY 13
29	MY 28	MY 29	MY 10
30	MY 25	MY 26	MY 27
31	MY 22	MY 23	MY 24
32		MY 20	MY 21

13

MATTE

(1B)

MY-50

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK14 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK6 (27.0M)
11	AUX1 6	AUX1 7	AUX1 8	AUX1 9
12	AUX1 2	AUX1 3	AUX1 4	AUX1 5
13	AUX4 8	AUX4 9	AUX1 0	AUX1 1
14	AUX4 4	AUX4 5	AUX4 6	AUX4 7
15	AUX4 0	AUX4 1	AUX4 2	AUX4 3
16	PVW 6	PVW 7	PVW 8	PVW 9
17	PVW 2	PVW 3	PVW 4	PVW 5
18	AUX2 8	AUX2 9	PVW 0	PVW 1
19	AUX2 4	AUX2 5	AUX2 6	AUX2 7
20	AUX2 0	AUX2 1	AUX2 2	AUX2 3
21	AUX3 6	AUX3 7	AUX3 8	AUX3 9
22	AUX3 2	AUX3 3	AUX3 4	AUX3 5
23			AUX3 0	AUX3 1
24				
25				
26				
27				
28				
29				
30				
31	GND	GND		
32	GND	GND		

	A	B	C	D
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13	PVW OUT 8	PVW OUT 9		
14	PVW OUT 6	PVW OUT 7		
15	PVW OUT 4	PVW OUT 5		
16	PVW OUT 2	PVW OUT 3		
17	PVW OUT 0	PVW OUT 1		
18	CKMSK 18	CKMSK 19		
19	CKMSK 14	CKMSK 15	CKMSK 16	CKMSK 17
20	CKMSK 10	CKMSK 11	CKMSK 12	CKMSK 13
21	CKMSK 26	CKMSK 27	CKMSK 28	CKMSK 29
22	CKMSK 22	CKMSK 23	CKMSK 24	CKMSK 25
23	WSLD 112	WSLD 113	CKMSK 20	CKMSK 21
24	WSLD 1 8	WSLD 1 9	WSLD 110	WSLD 111
25	WSLD 1 4	WSLD 1 5	WSLD 1 6	WSLD 1 7
26	WSLD 1 0	WSLD 1 1	WSLD 1 2	WSLD 1 3
27	WSLD 210	WSLD 211	WSLD 212	WSLD 213
28	WSLD 2 6	WSLD 2 7	WSLD 2 8	WSLD 2 9
29	WSLD 2 2	WSLD 2 3	WSLD 2 4	WSLD 2 5
30			WSLD 2 0	WSLD 2 1
31	GND	GND		
32	GND	GND		

	A	B	C
1	GND	GND	GND
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26	MY 17	MY 18	MY 19
27	MY 14	MY 15	MY 16
28	MY 11	MY 12	MY 13
29	MY 28	MY 29	MY 10
30	MY 25	MY 26	MY 27
31	MY 22	MY 23	MY 24
32		MY 20	MY 21

14

MEMORY

(1C)

XPT-1

X

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK15 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK7 (27.0M)
11	AUX1 6	AUX1 7	AUX1 8	AUX1 9
12	AUX1 2	AUX1 3	AUX1 4	AUX1 5
13	AUX4 8	AUX4 9	AUX1 0	AUX1 1
14	AUX4 4	AUX4 5	AUX4 6	AUX4 7
15	AUX4 0	AUX4 1	AUX4 2	AUX4 3
16	PVW 6	PVW 7	PVW 8	PVW 9
17	PVW 2	PVW 3	PVW 4	PVW 5
18	AUX2 8	AUX2 9	PVW 0	PVW 1
19	AUX2 4	AUX2 5	AUX2 6	AUX2 7
20	AUX2 0	AUX2 1	AUX2 2	AUX2 3
21	AUX3 6	AUX3 7	AUX3 8	AUX3 9
22	AUX3 2	AUX3 3	AUX3 4	AUX3 5
23	BKGD A D8	BKGD A D9	AUX3 0	AUX3 1
24	BKGD A D4	BKGD A D5	BKGD A D6	BKGD A D7
25	BKGD A D0	BKGD A D1	BKGD A D2	BKGD A D3
26	BKGD B D6	BKGD B D7	BKGD B D8	BKGD B D9
27	BKGD B D2	BKGD B D3	BKGD B D4	BKGD B D5
28	FILL D8	FILL D9	BKGD B D0	BKGD B D1
29	FILL D4	FILL D5	FILL D6	FILL D7
30	FILL D0	FILL D1	FILL D2	FILL D3
31	GND	GND	KYSR 2 18	KYSR 2 19
32	GND	GND	KYSR 2 16	KYSR 2 17

Y

	A	B	C	D
1	KYSR 2 12	KYSR 2 13	KYSR 2 14	KYSR 2 15
2	KYSR 1 18	KYSR 1 19	KYSR 2 10	KYSR 2 11
3	KYSR 1 14	KYSR 1 15	KYSR 1 16	KYSR 1 17
4	KYSR 1 10	KYSR 1 11	KYSR 1 12	KYSR 1 13
5	KYSR D6	KYSR D7	KYSR D8	KYSR D9
6	KYSR D2	KYSR D3	KYSR D4	KYSR D5
7	KYSR 2 28	KYSR 2 29	KYSR D0	KYSR D1
8	KYSR 2 24	KYSR 2 25	KYSR 2 26	KYSR 2 27
9	KYSR 2 20	KYSR 2 21	KYSR 2 22	KYSR 2 23
10	KYSR 1 26	KYSR 1 27	KYSR 1 28	KYSR 1 29
11	KYSR 1 22	KYSR 1 23	KYSR 1 24	KYSR 1 25
12	BKGD A 28	BKGD A 29	KYSR 1 20	KYSR 1 21
13	BKGD A 24	BKGD A 25	BKGD A 26	BKGD A 27
14	BKGD A 20	BKGD A 21	BKGD A 22	BKGD A 23
15	BKGD B 26	BKGD B 27	BKGD B 28	BKGD B 29
16	BKGD B 22	BKGD B 23	BKGD B 24	BKGD B 25
17	FILL 2 28	FILL 2 29	BKGD B 20	BKGD B 21
18	FILL 2 24	FILL 2 25	FILL 2 26	FILL 2 27
19	FILL 2 20	FILL 2 21	FILL 2 22	FILL 2 23
20	FILL 1 26	FILL 1 27	FILL 1 28	FILL 1 29
21	FILL 1 22	FILL 1 23	FILL 1 24	FILL 1 25
22	BKGD A 18	BKGD A 19	FILL 1 20	FILL 1 21
23	BKGD A 14	BKGD A 15	BKGD A 16	BKGD A 17
24	BKGD A 10	BKGD A 11	BKGD A 12	BKGD A 13
25	BKGD B 16	BKGD B 17	BKGD B 18	BKGD B 19
26	BKGD B 12	BKGD B 13	BKGD B 14	BKGD B 15
27	FILL 2 18	FILL 2 19	BKGD B 10	BKGD B 11
28	FILL 2 14	FILL 2 15	FILL 2 16	FILL 2 17
29	FILL 2 10	FILL 2 11	FILL 2 12	FILL 2 13
30	FILL 1 16	FILL 1 17	FILL 1 18	FILL 1 19
31	GND	GND	FILL 1 14	FILL 1 15
32	GND	GND	FILL 1 12	FILL 1 13

Z

	A	B	C
1	GND	GND	GND
2	MASK 39	FILL 1 10	FILL 1 11
3	MASK 36	MASK 37	MASK 38
4	MASK 33	MASK 34	MASK 35
5	MASK 30	MASK 31	MASK 32
6	MASK 27	MASK 28	MASK 29
7	MASK 24	MASK 25	MASK 26
8	MASK 21	MASK 22	MASK 23
9	MASK 18	MASK 19	MASK 20
10	MASK 15	MASK 16	MASK 17
11	MASK 12	MASK 13	MASK 14
12		MASK 10	MASK 11
13			
14			
15			
16			
17			
18		INPUT 18	
19			
20		INPUT 17	
21			
22		INPUT 16	
23			
24		INPUT 15	
25			
26		INPUT 14	
27			
28		INPUT 13	
29			
30		INPUT 12	
31			
32		INPUT 11	

15

PRI INPUT 1

(1D)

XPT-1

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK15 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK7 (27.0M)
11	AUX1 6	AUX1 7	AUX1 8	AUX1 9
12	AUX1 2	AUX1 3	AUX1 4	AUX1 5
13	AUX4 8	AUX4 9	AUX1 0	AUX1 1
14	AUX4 4	AUX4 5	AUX4 6	AUX4 7
15	AUX4 0	AUX4 1	AUX4 2	AUX4 3
16	PVW 6	PVW 7	PVW 8	PVW 9
17	PVW 2	PVW 3	PVW 4	PVW 5
18	AUX2 8	AUX2 9	PVW 0	PVW 1
19	AUX2 4	AUX2 5	AUX2 6	AUX2 7
20	AUX2 0	AUX2 1	AUX2 2	AUX2 3
21	AUX3 6	AUX3 7	AUX3 8	AUX3 9
22	AUX3 2	AUX3 3	AUX3 4	AUX3 5
23	BKGD A D8	BKGD A D9	AUX3 0	AUX3 1
24	BKGD A D4	BKGD A D5	BKGD A D6	BKGD A D7
25	BKGD A D0	BKGD A D1	BKGD A D2	BKGD A D3
26	BKGD B D6	BKGD B D7	BKGD B D8	BKGD B D9
27	BKGD B D2	BKGD B D3	BKGD B D4	BKGD B D5
28	FILL D8	FILL D9	BKGD B D0	BKGD B D1
29	FILL D4	FILL D5	FILL D6	FILL D7
30	FILL D0	FILL D1	FILL D2	FILL D3
31	GND	GND	KYSR 2 18	KYSR 2 19
32	GND	GND	KYSR 2 16	KYSR 2 17

	A	B	C	D
1	KYSR 2 12	KYSR 2 13	KYSR 2 14	KYSR 2 15
2	KYSR 1 18	KYSR 1 19	KYSR 2 10	KYSR 2 11
3	KYSR 1 14	KYSR 1 15	KYSR 1 16	KYSR 1 17
4	KYSR 1 10	KYSR 1 11	KYSR 1 12	KYSR 1 13
5	KYSR D6	KYSR D7	KYSR D8	KYSR D9
6	KYSR D2	KYSR D3	KYSR D4	KYSR D5
7	KYSR 2 28	KYSR 2 29	KYSR D0	KYSR D1
8	KYSR 2 24	KYSR 2 25	KYSR 2 26	KYSR 2 27
9	KYSR 2 20	KYSR 2 21	KYSR 2 22	KYSR 2 23
10	KYSR 1 26	KYSR 1 27	KYSR 1 28	KYSR 1 29
11	KYSR 1 22	KYSR 1 23	KYSR 1 24	KYSR 1 25
12	BKGD A 28	BKGD A 29	KYSR 1 20	KYSR 1 21
13	BKGD A 24	BKGD A 25	BKGD A 26	BKGD A 27
14	BKGD A 20	BKGD A 21	BKGD A 22	BKGD A 23
15	BKGD B 26	BKGD B 27	BKGD B 28	BKGD B 29
16	BKGD B 22	BKGD B 23	BKGD B 24	BKGD B 25
17	FILL 2 28	FILL 2 29	BKGD B 20	BKGD B 21
18	FILL 2 24	FILL 2 25	FILL 2 26	FILL 2 27
19	FILL 2 20	FILL 2 21	FILL 2 22	FILL 2 23
20	FILL 1 26	FILL 1 27	FILL 1 28	FILL 1 29
21	FILL 1 22	FILL 1 23	FILL 1 24	FILL 1 25
22	BKGD A 18	BKGD A 19	FILL 1 20	FILL 1 21
23	BKGD A 14	BKGD A 15	BKGD A 16	BKGD A 17
24	BKGD A 10	BKGD A 11	BKGD A 12	BKGD A 13
25	BKGD B 16	BKGD B 17	BKGD B 18	BKGD B 19
26	BKGD B 12	BKGD B 13	BKGD B 14	BKGD B 15
27	FILL 2 18	FILL 2 19	BKGD B 10	BKGD B 11
28	FILL 2 14	FILL 2 15	FILL 2 16	FILL 2 17
29	FILL 2 10	FILL 2 11	FILL 2 12	FILL 2 13
30	FILL 1 16	FILL 1 17	FILL 1 18	FILL 1 19
31	GND	GND	FILL 1 14	FILL 1 15
32	GND	GND	FILL 1 12	FILL 1 13

	A	B	C
1	GND	GND	GND
2	MASK 39	FILL 1 10	FILL 1 11
3	MASK 36	MASK 37	MASK 38
4	MASK 33	MASK 34	MASK 35
5	MASK 30	MASK 31	MASK 32
6	MASK 27	MASK 28	MASK 29
7	MASK 24	MASK 25	MASK 26
8	MASK 21	MASK 22	MASK 23
9	MASK 18	MASK 19	MASK 20
10	MASK 15	MASK 16	MASK 17
11	MASK 12	MASK 13	MASK 14
12		MASK 10	MASK 11
13			
14			
15			
16			
17			
18		INPUT 28	
19			
20		INPUT 27	
21			
22		INPUT 26	
23			
24		INPUT 25	
25			
26		INPUT 24	
27			
28		INPUT 23	
29			
30		INPUT 22	
31			
32		INPUT 21	

16

PRI INPUT 2

MB-245 (4/5)
1-636-516-12
DVS-8000

MB-245 (3/5) MOTHER BOARD S/N: 10061 and higher

(16)
MIX-6

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK12 (13.5M)
10	GND	GND	GND	CK4 (27.0M)
11				
12				
13				
14				
15				
16	KYSR D8	KYSR D9		
17	KYSR D4	KYSR D5	KYSR D6	KYSR D7
18	KYSR D0	KYSR D1	KYSR D2	KYSR D3
19				
20				
21				
22				
23				
24				
25				
26	BKGD A D8	BKGD A D9		
27	BKGD A D4	BKGD A D5	BKGD A D6	BKGD A D7
28	BKGD A D0	BKGD A D1	BKGD A D2	BKGD A D3
29	BKGD B D6	BKGD B D7	BKGD B D8	BKGD B D9
30	BKGD B D2	BKGD B D3	BKGD B D4	BKGD B D5
31	GND	GND	BKGD B D0	BKGD B D1
32	GND	GND		

	A	B	C	D
1	FILL D6	FILL D7	FILL D8	FILL D9
2	FILL D2	FILL D3	FILL D4	FILL D5
3	PVW P8	PVW P9	FILL D0	FILL D1
4	PVW P4	PVW P5	PVW P6	PVW P7
5	PVW P0	PVW P1	PVW P2	PVW P3
6	PGM P6	PGM P7	PGM P8	PGM P9
7	PGM P2	PGM P3	PGM P4	PGM P5
8	WSLD 112	WSLD 113	PGM P0	PGM P1
9	WSLD 18	WSLD 19	WSLD 110	WSLD 111
10	WSLD 14	WSLD 15	WSLD 16	WSLD 17
11	WSLD 10	WSLD 11	WSLD 12	WSLD 13
12	WSLD 210	WSLD 211	WSLD 212	WSLD 213
13	WSLD 26	WSLD 27	WSLD 28	WSLD 29
14	WSLD 22	WSLD 23	WSLD 24	WSLD 25
15	WSLD 312	WSLD 313	WSLD 20	WSLD 21
16	WSLD 38	WSLD 39	WSLD 310	WSLD 311
17	WSLD 34	WSLD 35	WSLD 36	WSLD 37
18	WSLD 30	WSLD 31	WSLD 32	WSLD 33
19	CLFD 6	CLFD 7	CLFD 8	CLFD 9
20	CLFD 2	CLFD 3	CLFD 4	CLFD 5
21			CLFD 0	CLFD 1
22	MASK 38	MASK 39		
23	MASK 34	MASK 35	MASK 36	MASK 37
24	MASK 30	MASK 31	MASK 32	MASK 33
25				
26				
27				
28				
29				
30				
31	GND	GND		
32	GND	GND		

	A	B	C
1			
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9
PGM/PST

(17)
OUT-1

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK12 (13.5M)
10	GND	GND	GND	CK4 (27.0M)
11	AUX1 8	AUX1 9		
12	AUX1 4	AUX1 5	AUX1 6	AUX1 7
13	AUX1 0	AUX1 1	AUX1 2	AUX1 3
14	AUX4 6	AUX4 7	AUX4 8	AUX4 9
15	AUX4 2	AUX4 3	AUX4 4	AUX4 5
16	PVW 8	PVW 9	AUX4 0	AUX4 1
17	PVW 4	PVW 5	PVW 6	PVW 7
18	PVW 0	PVW 1	PVW 2	PVW 3
19	AUX2 6	AUX2 7	AUX2 8	AUX2 9
20	AUX2 2	AUX2 3	AUX2 4	AUX2 5
21	AUX3 8	AUX3 9	AUX2 0	AUX2 1
22	AUX3 4	AUX3 5	AUX3 6	AUX3 7
23	AUX3 0	AUX3 1	AUX3 2	AUX3 3
24	PGM 16	PGM 17	PGM 18	PGM 19
25	PGM 12	PGM 13	PGM 14	PGM 15
26	PGM 28	PGM 29	PGM 10	PGM 11
27	PGM 24	PGM 25	PGM 26	PGM 27
28	PGM 20	PGM 21	PGM 22	PGM 23
29	PVW 16	PVW 17	PVW 18	PVW 19
30	PVW 12	PVW 13	PVW 14	PVW 15
31	GND	GND	PVW 10	PVW 11
32	GND	GND		

	A	B	C	D
1	PVW 26	PVW 27	PVW 28	PVW 29
2	PVW 22	PVW 23	PVW 24	PVW 25
3	PVW P8	PVW P9	PVW 20	PVW 21
4	PVW P4	PVW P5	PVW P6	PVW P7
5	PVW P0	PVW P1	PVW P2	PVW P3
6	PGM P6	PGM P7	PGM P8	PGM P9
7	PGM P2	PGM P3	PGM P4	PGM P5
8	CLFD 8	CLFD 9	PGM P0	PGM P1
9	CLFD 4	CLFD 5	CLFD 6	CLFD 7
10	CLFD 0	CLFD 1	CLFD 2	CLFD 3
11				
12				
13	CRKV 28	CRKV 29		
14	CRKV 24	CRKV 25	CRKV 26	CRKV 27
15	CRKV 20	CRKV 21	CRKV 22	CRKV 23
16	CRKV 16	CRKV 17	CRKV 18	CRKV 19
17	CRKV 12	CRKV 13	CRKV 14	CRKV 15
18	BB 8	BB 9	CRKV 10	CRKV 11
19	BB 6	BB 7		
20	BB 4	BB 5		
21	BB 2	BB 3		
22	BB 0	BB 1		
23	PVW OUT 8	PVW OUT 9		
24	PVW OUT 6	PVW OUT 7		
25	PVW OUT 4	PVW OUT 5		
26	PVW OUT 2	PVW OUT 3		
27	PVW OUT 0	PVW OUT 1		
28				
29				
30				
31	GND	GND		
32	GND	GND		

	A	B	C
1	GND	GND	GND
2	GND	ED PVW	GND
3	GND	GND	GND
4	GND	AUX 4	GND
5	GND	GND	GND
6	GND	AUX 2	GND
7	GND	GND	GND
8	GND	ED PVW	GND
9	GND	GND	GND
10	GND	CLFD	GND
11	GND	GND	GND
12	GND	PGM	GND
13	GND	GND	GND
14	GND	PGM	GND
15	GND	GND	GND
16	GND	PGM	GND
17	GND	GND	GND
18	GND	PGM	GND
19	GND	GND	GND
20	GND	DSK PVW	GND
21	GND	GND	GND
22	GND	AUX 3	GND
23	GND	GND	GND
24	GND	AUX 1	GND
25	GND	GND	GND
26	GND	ME2 PVW	GND
27	GND	GND	GND
28	GND	ME1 PVW	GND
29	GND	GND	GND
30	GND	ME2 PGM	GND
31	GND	GND	GND
32	GND	ME1 PGM	GND

10
OUTPUT

(18)
CRK-4 (D-1)
CRK-5 (D-2)

X

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK13 (13.5M)
10	GND	GND	GND	CK5 (27.0M)
11	KYSR 2 18	KYSR 2 19		
12	KYSR 2 14	KYSR 2 15	KYSR 2 16	KYSR 2 17
13	KYSR 2 10	KYSR 2 11	KYSR 2 12	KYSR 2 13
14	KYSR 1 16	KYSR 1 17	KYSR 1 18	KYSR 1 19
15	KYSR 1 12	KYSR 1 13	KYSR 1 14	KYSR 1 15
16			KYSR 1 10	KYSR 1 11
17				
18				
19				
20				
21				
22				
23				
24	BKGD R8	BKGD R9	BKGD R10	BKGD R11
25	BKGD R4	BLGD R5	BKGD R6	BKGD R7
26	BKGD R0	BKGD R1	BKGD R2	BKGD R3
27	BKGD G8	BKGD G9	BKGD G10	BKGD G11
28	BKGD G4	BKGD G5	BKGD G6	BKGD G7
29	BKGD G0	BKGD G1	BKGD G2	BKGD G3
30	BKGD B8	BKGD B9	BKGD B10	BKGD B11
31	GND	GND	BKGD B6	BKGD B7
32	GND	GND	BKGD B4	BKGD B5

Y

	A	B	C	D
1	BKGD B0	BKGD B1	BKGD B2	BKGD B3
2	FRGD R8	FRGD R9	FRGD R10	FRGD R11
3	FRGD R4	FRGD R5	FRGD R6	FRGD R7
4	FRGD R0	FRGD R1	FRGD R2	FRGD R3
5	FRGD G8	FRGD G9	FRGD G10	FRGD G11
6	FRGD G4	FRGD G5	FRGD G6	FRGD G7
7	FRGD G0	FRGD G1	FRGD G2	FRGD G3
8	FRGD B8	FRGD B9	FRGD B10	FRGD B11
9	FRGD B4	FRGD B5	FRGD B6	FRGD B7
10	FRGD B0	FRGD B1	FRGD B2	FRGD B3
11	CRK 6	CRK 7	CRK 8	CRK 9
12	CRK 2	CRK 3	CRK 4	CRK 5
13	CRKV 18	CRKV 19	CRK 0	CRK 1
14	CRKV 14	CRKV 15	CRKV 16	CRKV 17
15	CRKV 10	CRKV 11	CRKV 12	CRKV 13
16	CRKY 16	CRKY 17	CRKY 18	CRKY 19
17	CRKY 12	CRKY 13	CRKY 14	CRKY 15
18	CKFL 18	CKFL 19	CRKY 10	CRKY 11
19	CKFL 14	CKFL 15	CKFL 16	CKFL 17
20	CKFL 10	CKFL 11	CKFL 12	CKFL 13
21	CKMSK 16	CKMSK 17	CKMSK 18	CKMSK 19
22	CKMSK 12	CKMSK 13	CKMSK 14	CKMSK 15
23			CKMSK 10	CKMSK 11
24				
25				
26				
27				
28				
29				
30				
31	GND	GND		
32	GND	GND		

Z

	A	B	C
1			
2			
3			
4			
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9			
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31			
32			

11
CHROMA KEY

(19)
CRK-4 (D-1)
ADC-5 (D-2)

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK13 (13.5M)
10	GND	GND	GND	CK5 (27.0M)
11				
12				
13				
14				
15				
16				
17				
18				
19	KYSR 2 26	KYSR 2 27	KYSR 2 28	KYSR 2 29
20	KYSR 2 22	KYSR 2 23	KYSR 2 24	KYSR 2 25
21	KYSR 1 28	KYSR 1 29	KYSR 2 20	KYSR 2 21
22	KYSR 1 24	KYSR 1 25	KYSR 1 26	KYSR 1 27
23	KYSR 1 20	KYSR 1 21	KYSR 1 22	KYSR 1 23
24	BKGD Y8	BKGD Y9	BKGD Y10	BKGD Y11
25	BKGD Y4	BKGD Y5	BKGD Y6	BKGD Y7
26	BKGD Y0	BKGD Y1	BKGD Y2	BKGD Y3
27	BKGD I8	BKGD I9	BKGD I10	BKGD I11
28	BKGD I4	BKGD I5	BKGD I6	BKGD I7
29	BKGD I0	BKGD I1	BKGD I2	BKGD I3
30	BKGD Q8	BKGD Q9	BKGD Q10	BKGD Q11
31	GND	GND	BKGD Q6	BKGD Q7
32	GND	GND	BKGD Q4	BKGD Q5

	A	B	C	D
1	BKGD Q0	BKGD Q1	BKGD Q2	BKGD Q3
2	FRGD Y8	FRGD Y9	FRGD Y10	FRGD Y11
3	FRGD Y4	FRGD Y5	FRGD Y6	FRGD Y7
4	FRGD Y0	FRGD Y1	FRGD Y2	FRGD Y3
5	FRGD V8	FRGD V9	FRGD V10	FRGD V11
6	FRGD V4	FRGD V5	FRGD V6	FRGD V7
7	FRGD V0	FRGD V1	FRGD V2	FRGD V3
8	FRGD U8	FRGD U9	FRGD U10	FRGD U11
9	FRGD U4	FRGD U5	FRGD U6	FRGD U7
10	FRGD U0	FRGD U1	FRGD U2	FRGD U3
11	CRK 6	CRK 7	CRK 8	CRK 9
12	CRK 2	CRK 3	CRK 4	CRK 5
13	CRKV 28	CRKV 29	CRK 0	CRK 1
14	CRKV 24	CRKV 25	CRKV 26	CRKV 27
15	CRKV 20	CRKV 21	CRKV 22	CRKV 23
16	CRKY 26	CRKY 27	CRKY 28	CRKY 29
17	CRKY 22	CRKY 23	CRKY 24	CRKY 25
18	CKFL 28	CKFL 29	CRKY 20	CRKY 21
19	CKFL 24	CKFL 25	CKFL 26	CKFL 27
20	CKFL 20	CKFL 21	CKFL 22	CKFL 23
21	CKMSK 26	CKMSK 27	CKMSK 28	CKMSK 29
22	CKMSK 22	CKMSK 23	CKMSK 24	CKMSK 25
23			CKMSK 20	CKMSK 21
24				
25				
26				
27				
28				
29				
30				
31	GND	GND		
32	GND	GND		

	A	B	C
1			
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4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14	GND	GND	GND
15	GND	GND	GND
16	GND	GND	GND
17	GND	GND	GND
18	GND	SYNC 2	GND
19	GND	GND	GND
20	GND	R-Y/R 2	GND
21	GND	GND	GND
22	GND	B-Y/B 2	GND
23	GND	GND	GND
24	GND	Y/G 2	GND
25	GND	GND	GND
26	GND	SYNC 1	GND
27	GND	GND	GND
28	GND	R-Y/R 1	GND
29	GND	GND	GND
30	GND	B-Y/B 1	GND
31	GND	GND	GND
32	GND	Y/G 1	GND

12
AD

MB-245 (3/5)
1-636-516-13
DVS-8000

MB-245 (4/5) MOTHER BOARD S/N: 10061 and higher

(1A)
MAT-1

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK14 (13.5M)
10	GND	GND	GND	CK6 (27.0M)
11	AUX1 6	AUX1 7	AUX1 8	AUX1 9
12	AUX1 2	AUX1 3	AUX1 4	AUX1 5
13	AUX4 8	AUX4 9	AUX1 0	AUX1 1
14	AUX4 4	AUX4 5	AUX4 6	AUX4 7
15	AUX4 0	AUX4 1	AUX4 2	AUX4 3
16	PVW 6	PVW 7	PVW 8	PVW 9
17	PVW 2	PVW 3	PVW 4	PVW 5
18	AUX2 8	AUX2 9	PVW 0	PVW 1
19	AUX2 4	AUX2 5	AUX2 6	AUX2 7
20	AUX2 0	AUX2 1	AUX2 2	AUX2 3
21	AUX3 6	AUX3 7	AUX3 8	AUX3 9
22	AUX3 2	AUX3 3	AUX3 4	AUX3 5
23	PGM 18	PGM 19	AUX3 0	AUX3 1
24	PGM 14	PGM 15	PGM 16	PGM 17
25	PGM 10	PGM 11	PGM 12	PGM 13
26	PGM 26	PGM 27	PGM 28	PGM 29
27	PGM 22	PGM 23	PGM 24	PGM 25
28	BKGD A D8	BKGD A D9	PGM 20	PGM 21
29	BKGD A D4	BKGD A D5	BKGD A D6	BKGD A D7
30	BKGD A D0	BKGD A D1	BKGD A D2	BKGD A D3
31	GND	GND	BKGD B D8	BKGD B D9
32	GND	GND	BKGD B D6	BKGD B D7

	A	B	C	D
1	BKGD B D2	BKGD B D3	BKGD B D4	BKGD B D5
2	FILL D8	FILL D9	BKGD B D0	BKGD B D1
3	FILL D4	FILL D5	FILL D6	FILL D7
4	FILL D0	FILL D1	FILL D2	FILL D3
5	KYSR 2 16	KYSR 2 17	KYSR 2 18	KYSR 2 19
6	KYSR 2 12	KYSR 2 13	KYSR 2 14	KYSR 2 15
7	KYSR 1 18	KYSR 1 19	KYSR 2 10	KYSR 2 11
8	KYSR 1 14	KYSR 1 15	KYSR 1 16	KYSR 1 17
9	KYSR 1 10	KYSR 1 11	KYSR 1 12	KYSR 1 13
10	KYSR D6	KYSR D7	KYSR D8	KYSR D9
11	KYSR D2	KYSR D3	KYSR D4	KYSR D5
12	KYSR 2 28	KYSR 2 29	KYSR D0	KYSR D1
13	KYSR 2 24	KYSR 2 25	KYSR 2 26	KYSR 2 27
14	KYSR 2 20	KYSR 2 21	KYSR 2 22	KYSR 2 23
15	KYSR 1 26	KYSR 1 27	KYSR 1 28	KYSR 1 29
16	KYSR 1 22	KYSR 1 23	KYSR 1 24	KYSR 1 25
17	BKGD A 28	BKGD A 29	KYSR 1 20	KYSR 1 21
18	BKGD A 24	BKGD A 25	BKGD A 26	BKGD A 27
19	BKGD A 20	BKGD A 21	BKGD A 22	BKGD A 23
20	BKGD B 26	BKGD B 27	BKGD B 28	BKGD B 29
21	BKGD B 22	BKGD B 23	BKGD B 24	BKGD B 25
22	FILL 2 28	FILL 2 29	BKGD B 20	BKGD B 21
23	FILL 2 24	FILL 2 25	FILL 2 26	FILL 2 27
24	FILL 2 20	FILL 2 21	FILL 2 22	FILL 2 23
25	FILL 1 26	FILL 1 27	FILL 1 28	FILL 1 29
26	FILL 1 22	FILL 1 23	FILL 1 24	FILL 1 25
27	BKGD A 18	BKGD A 19	FILL 1 20	FILL 1 21
28	BKGD A 14	BKGD A 15	BKGD A 16	BKGD A 17
29	BKGD A 10	BKGD A 11	BKGD A 12	BKGD A 13
30	BKGD B 16	BKGD B 17	BKGD B 18	BKGD B 19
31	GND	GND	BKGD B 14	BKGD B 15
32	GND	GND	BKGD B 12	BKGD B 13

	A	B	C
1	GND	GND	GND
2	FILL 2 19	BKGD B 10	BKGD B 11
3	FILL 2 16	FILL 2 17	FILL 2 18
4	FILL 2 13	FILL 2 14	FILL 2 15
5	FILL 2 10	FILL 2 11	FILL 2 12
6	FILL 1 17	FILL 1 18	FILL 1 19
7	FILL 1 14	FILL 1 15	FILL 1 16
8	FILL 1 11	FILL 1 12	FILL 1 13
9	MASK 38	MASK 39	FILL 1 10
10	MASK 35	MASK 36	MASK 37
11	MASK 32	MASK 33	MASK 34
12	MASK 29	MASK 30	MASK 31
13	MASK 26	MASK 27	MASK 28
14	MASK 23	MASK 24	MASK 25
15	MASK 20	MASK 21	MASK 22
16	MASK 17	MASK 18	MASK 19
17	MASK 14	MASK 15	MASK 16
18	MASK 11	MASK 12	MASK 13
19	CKFL 18	CKFL 19	MASK 10
20	CKFL 15	CKFL 16	CKFL 17
21	CKFL 12	CKFL 13	CKFL 14
22	CKFL 29	CKFL 10	CKFL 11
23	CKFL 26	CKFL 27	CKFL 28
24	CKFL 23	CKFL 24	CKFL 25
25	CKFL 20	CKFL 21	CKFL 22
26	MY 17	MY 18	MY 19
27	MY 14	MY 15	MY 16
28	MY 11	MY 12	MY 13
29	MY 28	MY 29	MY 10
30	MY 25	MY 26	MY 27
31	MY 22	MY 23	MY 24
32	GND	MY 20	MY 21

13
MATTE

(1B)
MY-50

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK14 (13.5M)
10	GND	GND	GND	CK6 (27.0M)
11	AUX1 6	AUX1 7	AUX1 8	AUX1 9
12	AUX1 2	AUX1 3	AUX1 4	AUX1 5
13	AUX4 8	AUX4 9	AUX1 0	AUX1 1
14	AUX4 4	AUX4 5	AUX4 6	AUX4 7
15	AUX4 0	AUX4 1	AUX4 2	AUX4 3
16	PVW 6	PVW 7	PVW 8	PVW 9
17	PVW 2	PVW 3	PVW 4	PVW 5
18	AUX2 8	AUX2 9	PVW 0	PVW 1
19	AUX2 4	AUX2 5	AUX2 6	AUX2 7
20	AUX2 0	AUX2 1	AUX2 2	AUX2 3
21	AUX3 6	AUX3 7	AUX3 8	AUX3 9
22	AUX3 2	AUX3 3	AUX3 4	AUX3 5
23			AUX3 0	AUX3 1
24				
25				
26				
27				
28				
29				
30				
31	GND	GND		
32	GND	GND		

	A	B	C	D
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13	PVW OUT 8	PVW OUT 9		
14	PVW OUT 6	PVW OUT 7		
15	PVW OUT 4	PVW OUT 5		
16	PVW OUT 2	PVW OUT 3		
17	PVW OUT 0	PVW OUT 1		
18	CKMSK 18	CKMSK 19		
19	CKMSK 14	CKMSK 15	CKMSK 16	CKMSK 17
20	CKMSK 10	CKMSK 11	CKMSK 12	CKMSK 13
21	CKMSK 26	CKMSK 27	CKMSK 28	CKMSK 29
22	CKMSK 22	CKMSK 23	CKMSK 24	CKMSK 25
23	WSLD 112	WSLD 113	CKMSK 20	CKMSK 21
24	WSLD 1 8	WSLD 1 9	WSLD 110	WSLD 111
25	WSLD 1 4	WSLD 1 5	WSLD 1 6	WSLD 1 7
26	WSLD 1 0	WSLD 1 1	WSLD 1 2	WSLD 1 3
27	WSLD 210	WSLD 211	WSLD 212	WSLD 213
28	WSLD 2 6	WSLD 2 7	WSLD 2 8	WSLD 2 9
29	WSLD 2 2	WSLD 2 3	WSLD 2 4	WSLD 2 5
30			WSLD 2 0	WSLD 2 1
31	GND	GND		
32	GND	GND		

	A	B	C
1	GND	GND	GND
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3			
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13			
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19			
20			
21			
22			
23			
24			
25			
26	MY 17	MY 18	MY 19
27	MY 14	MY 15	MY 16
28	MY 11	MY 12	MY 13
29	MY 28	MY 29	MY 10
30	MY 25	MY 26	MY 27
31	MY 22	MY 23	MY 24
32	GND	MY 20	MY 21

14
MEMORY

(1C)
XPT-1

X

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK15 (13.5M)
10	GND	GND	GND	CK7 (27.0M)
11	AUX1 6	AUX1 7	AUX1 8	AUX1 9
12	AUX1 2	AUX1 3	AUX1 4	AUX1 5
13	AUX4 8	AUX4 9	AUX1 0	AUX1 1
14	AUX4 4	AUX4 5	AUX4 6	AUX4 7
15	AUX4 0	AUX4 1	AUX4 2	AUX4 3
16	PVW 6	PVW 7	PVW 8	PVW 9
17	PVW 2	PVW 3	PVW 4	PVW 5
18	AUX2 8	AUX2 9	PVW 0	PVW 1
19	AUX2 4	AUX2 5	AUX2 6	AUX2 7
20	AUX2 0	AUX2 1	AUX2 2	AUX2 3
21	AUX3 6	AUX3 7	AUX3 8	AUX3 9
22	AUX3 2	AUX3 3	AUX3 4	AUX3 5
23	BKGD A D8	BKGD A D9	AUX3 0	AUX3 1
24	BKGD A D4	BKGD A D5	BKGD A D6	BKGD A D7
25	BKGD A D0	BKGD A D1	BKGD A D2	BKGD A D3
26	BKGD B D6	BKGD B D7	BKGD B D8	BKGD B D9
27	BKGD B D2	BKGD B D3	BKGD B D4	BKGD B D5
28	FILL D8	FILL D9	BKGD B D0	BKGD B D1
29	FILL D4	FILL D5	FILL D6	FILL D7
30	FILL D0	FILL D1	FILL D2	FILL D3
31	GND	GND	KYSR 2 18	KYSR 2 19
32	GND	GND	KYSR 2 16	KYSR 2 17

Y

	A	B	C	D
1	KYSR 2 12	KYSR 2 13	KYSR 2 14	KYSR 2 15
2	KYSR 1 18	KYSR 1 19	KYSR 2 10	KYSR 2 11
3	KYSR 1 14	KYSR 1 15	KYSR 1 16	KYSR 1 17
4	KYSR 1 10	KYSR 1 11	KYSR 1 12	KYSR 1 13
5	KYSR D6	KYSR D7	KYSR D8	KYSR D9
6	KYSR D2	KYSR D3	KYSR D4	KYSR D5
7	KYSR 2 28	KYSR 2 29	KYSR D0	KYSR D1
8	KYSR 2 24	KYSR 2 25	KYSR 2 26	KYSR 2 27
9	KYSR 2 20	KYSR 2 21	KYSR 2 22	KYSR 2 23
10	KYSR 1 26	KYSR 1 27	KYSR 1 28	KYSR 1 29
11	KYSR 1 22	KYSR 1 23	KYSR 1 24	KYSR 1 25
12	BKGD A 28	BKGD A 29	KYSR 1 20	KYSR 1 21
13	BKGD A 24	BKGD A 25	BKGD A 26	BKGD A 27
14	BKGD A 20	BKGD A 21	BKGD A 22	BKGD A 23
15	BKGD B 26	BKGD B 27	BKGD B 28	BKGD B 29
16	BKGD B 22	BKGD B 23	BKGD B 24	BKGD B 25
17	FILL 2 28	FILL 2 29	BKGD B 20	BKGD B 21
18	FILL 2 24	FILL 2 25	FILL 2 26	FILL 2 27
19	FILL 2 20	FILL 2 21	FILL 2 22	FILL 2 23
20	FILL 1 26	FILL 1 27	FILL 1 28	FILL 1 29
21	FILL 1 22	FILL 1 23	FILL 1 24	FILL 1 25
22	BKGD A 18	BKGD A 19	FILL 1 20	FILL 1 21
23	BKGD A 14	BKGD A 15	BKGD A 16	BKGD A 17
24	BKGD A 10	BKGD A 11	BKGD A 12	BKGD A 13
25	BKGD B 16	BKGD B 17	BKGD B 18	BKGD B 19
26	BKGD B 12	BKGD B 13	BKGD B 14	BKGD B 15
27	FILL 2 18	FILL 2 19	BKGD B 10	BKGD B 11
28	FILL 2 14	FILL 2 15	FILL 2 16	FILL 2 17
29	FILL 2 10	FILL 2 11	FILL 2 12	FILL 2 13
30	FILL 1 16	FILL 1 17	FILL 1 18	FILL 1 19
31	GND	GND	FILL 1 14	FILL 1 15
32	GND	GND	FILL 1 12	FILL 1 13

Z

	A	B	C
1	GND	GND	GND
2	MASK 39	FILL 1 10	FILL 1 11
3	MASK 36	MASK 37	MASK 38
4	MASK 33	MASK 34	MASK 35
5	MASK 30	MASK 31	MASK 32
6	MASK 27	MASK 28	MASK 29
7	MASK 24	MASK 25	MASK 26
8	MASK 21	MASK 22	MASK 23
9	MASK 18	MASK 19	MASK 20
10	MASK 15	MASK 16	MASK 17
11	MASK 12	MASK 13	MASK 14
12	GND	MASK 10	MASK 11
13	GND	GND	GND
14	GND	GND	GND
15	GND	GND	GND
16	GND	GND	GND
17	GND	GND	GND
18	GND	INPUT 18	GND
19	GND	GND	GND
20	GND	INPUT 17	GND
21	GND	GND	GND
22	GND	INPUT 16	GND
23	GND	GND	GND
24	GND	INPUT 15	GND
25	GND	GND	GND
26	GND	INPUT 14	GND
27	GND	GND	GND
28	GND	INPUT 13	GND
29	GND	GND	GND
30	GND	INPUT 12	GND
31	GND	GND	GND
32	GND	INPUT 11	GND

15
PRI INPUT 1

(1D)
XPT-1

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK15 (13.5M)
10	GND	GND	GND	CK7 (27.0M)
11	AUX1 6	AUX1 7	AUX1 8	AUX1 9
12	AUX1 2	AUX1 3	AUX1 4	AUX1 5
13	AUX4 8	AUX4 9	AUX1 0	AUX1 1
14	AUX4 4	AUX4 5	AUX4 6	AUX4 7
15	AUX4 0	AUX4 1	AUX4 2	AUX4 3
16	PVW 6	PVW 7	PVW 8	PVW 9
17	PVW 2	PVW 3	PVW 4	PVW 5
18	AUX2 8	AUX2 9	PVW 0	PVW 1
19	AUX2 4	AUX2 5	AUX2 6	AUX2 7
20	AUX2 0	AUX2 1	AUX2 2	AUX2 3
21	AUX3 6	AUX3 7	AUX3 8	AUX3 9
22	AUX3 2	AUX3 3	AUX3 4	AUX3 5
23	BKGD A D8	BKGD A D9	AUX3 0	AUX3 1
24	BKGD A D4	BKGD A D5	BKGD A D6	BKGD A D7
25	BKGD A D0	BKGD A D1	BKGD A D2	BKGD A D3
26	BKGD B D6	BKGD B D7	BKGD B D8	BKGD B D9
27	BKGD B D2	BKGD B D3	BKGD B D4	BKGD B D5
28	FILL D8	FILL D9	BKGD B D0	BKGD B D1
29	FILL D4	FILL D5	FILL D6	FILL D7
30	FILL D0	FILL D1	FILL D2	FILL D3
31	GND	GND	KYSR 2 18	KYSR 2 19
32	GND	GND	KYSR 2 16	KYSR 2 17

	A	B	C	D
1	KYSR 2 12	KYSR 2 13	KYSR 2 14	KYSR 2 15
2	KYSR 1 18	KYSR 1 19	KYSR 2 10	KYSR 2 11
3	KYSR 1 14	KYSR 1 15	KYSR 1 16	KYSR 1 17
4	KYSR 1 10	KYSR 1 11	KYSR 1 12	KYSR 1 13
5	KYSR D6	KYSR D7	KYSR D8	KYSR D9
6	KYSR D2	KYSR D3	KYSR D4	KYSR D5
7	KYSR 2 28	KYSR 2 29	KYSR D0	KYSR D1
8	KYSR 2 24	KYSR 2 25	KYSR 2 26	KYSR 2 27
9	KYSR 2 20	KYSR 2 21	KYSR 2 22	KYSR 2 23
10	KYSR 1 26	KYSR 1 27	KYSR 1 28	KYSR 1 29
11	KYSR 1 22	KYSR 1 23	KYSR 1 24	KYSR 1 25
12	BKGD A 28	BKGD A 29	KYSR 1 20	KYSR 1 21
13	BKGD A 24	BKGD A 25	BKGD A 26	BKGD A 27
14	BKGD A 20	BKGD A 21	BKGD A 22	BKGD A 23
15	BKGD B 26	BKGD B 27	BKGD B 28	BKGD B 29
16	BKGD B 22	BKGD B 23	BKGD B 24	BKGD B 25
17	FILL 2 28	FILL 2 29	BKGD B 20	BKGD B 21
18	FILL 2 24	FILL 2 25	FILL 2 26	FILL 2 27
19	FILL 2 20	FILL 2 21	FILL 2 22	FILL 2 23
20	FILL 1 26	FILL 1 27	FILL 1 28	FILL 1 29
21	FILL 1 22	FILL 1 23	FILL 1 24	FILL 1 25
22	BKGD A 18	BKGD A 19	FILL 1 20	FILL 1 21
23	BKGD A 14	BKGD A 15	BKGD A 16	BKGD A 17
24	BKGD A 10	BKGD A 11	BKGD A 12	BKGD A 13
25	BKGD B 16	BKGD B 17	BKGD B 18	BKGD B 19
26	BKGD B 12	BKGD B 13	BKGD B 14	BKGD B 15
27	FILL 2 18	FILL 2 19	BKGD B 10	BKGD B 11
28	FILL 2 14	FILL 2 15	FILL 2 16	FILL 2 17
29	FILL 2 10	FILL 2 11	FILL 2 12	FILL 2 13
30	FILL 1 16	FILL 1 17	FILL 1 18	FILL 1 19
31	GND	GND	FILL 1 14	FILL 1 15
32	GND	GND	FILL 1 12	FILL 1 13

	A	B	C
1	GND	GND	GND
2	MASK 39	FILL 1 10	FILL 1 11
3	MASK 36	MASK 37	MASK 38
4	MASK 33	MASK 34	MASK 35
5	MASK 30	MASK 31	MASK 32
6	MASK 27	MASK 28	MASK 29
7	MASK 24	MASK 25	MASK 26
8	MASK 21	MASK 22	MASK 23
9	MASK 18	MASK 19	MASK 20
10	MASK 15	MASK 16	MASK 17
11	MASK 12	MASK 13	MASK 14
12	GND	MASK 10	MASK 11
13	GND	GND	GND
14	GND	GND	GND
15	GND	GND	GND
16	GND	GND	GND
17	GND	GND	GND
18	GND	INPUT 28	GND
19	GND	GND	GND
20	GND	INPUT 27	GND
21	GND	GND	GND
22	GND	INPUT 26	GND
23	GND	GND	GND
24	GND	INPUT 25	GND
25	GND	GND	GND
26	GND	INPUT 24	GND
27	GND	GND	GND
28	GND	INPUT 23	GND
29	GND	GND	GND
30	GND	INPUT 22	GND
31	GND	GND	GND
32	GND	INPUT 21	GND

16
PRI INPUT 2

MB-245 (4/5)
1-636-516-13
DVS-8000

B-SYX121-MB-D1#43

A | B | C | D | E | F | G | H

1 2 3 4 5

MB-245 (5/5) MOTHER BOARD

S/N; 10001 through 10060

(1E)

XPT-1

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK16 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK8 (27.0M)
11	AUX1 6	AUX1 7	AUX1 8	AUX1 9
12	AUX1 2	AUX1 3	AUX1 4	AUX1 5
13	AUX4 8	AUX4 9	AUX1 0	AUX1 1
14	AUX4 4	AUX4 5	AUX4 6	AUX4 7
15	AUX4 0	AUX4 1	AUX4 2	AUX4 3
16	PVW 6	PVW 7	PVW 8	PVW 9
17	PVW 2	PVW 3	PVW 4	PVW 5
18	AUX2 8	AUX2 9	PVW 0	PVW 1
19	AUX2 4	AUX2 5	AUX2 6	AUX2 7
20	AUX2 0	AUX2 1	AUX2 2	AUX2 3
21	AUX3 6	AUX3 7	AUX3 8	AUX3 9
22	AUX3 2	AUX3 3	AUX3 4	AUX3 5
23	BKGD A D8	BKGD A D9	AUX3 0	AUX3 1
24	BKGD A D4	BKGD A D5	BKGD A D6	BKGD A D7
25	BKGD A D0	BKGD A D1	BKGD A D2	BKGD A D3
26	BKGD B D6	BKGD B D7	BKGD B D8	BKGD B D9
27	BKGD B D2	BKGD B D3	BKGD B D4	BKGD B D5
28	FILL D8	FILL D9	BKGD B D0	BKGD B D1
29	FILL D4	FILL D5	FILL D6	FILL D7
30	FILL D0	FILL D1	FILL D2	FILL D3
31	GND	GND	KYSR 2 18	KYSR 2 19
32	GND	GND	KYSR 2 16	KYSR 2 17

	A	B	C	D
1	KYSR 2 12	KYSR 2 13	KYSR 2 14	KYSR 2 15
2	KYSR 1 18	KYSR 1 19	KYSR 2 10	KYSR 2 11
3	KYSR 1 14	KYSR 1 15	KYSR 1 16	KYSR 1 17
4	KYSR 1 10	KYSR 1 11	KYSR 1 12	KYSR 1 13
5	KYSR D6	KYSR D7	KYSR D8	KYSR D9
6	KYSR D2	KYSR D3	KYSR D4	KYSR D5
7	KYSR 2 28	KYSR 2 29	KYSR D0	KYSR D1
8	KYSR 2 24	KYSR 2 25	KYSR 2 26	KYSR 2 27
9	KYSR 2 20	KYSR 2 21	KYSR 2 22	KYSR 2 23
10	KYSR 1 26	KYSR 1 27	KYSR 1 28	KYSR 1 29
11	KYSR 1 22	KYSR 1 23	KYSR 1 24	KYSR 1 25
12	BKGD A 28	BKGD A 29	KYSR 1 20	KYSR 1 21
13	BKGD A 24	BKGD A 25	BKGD A 26	BKGD A 27
14	BKGD A 20	BKGD A 21	BKGD A 22	BKGD A 23
15	BKGD B 26	BKGD B 27	BKGD B 28	BKGD B 29
16	BKGD B 22	BKGD B 23	BKGD B 24	BKGD B 25
17	FILL 2 28	FILL 2 29	BKGD B 20	BKGD B 21
18	FILL 2 24	FILL 2 25	FILL 2 26	FILL 2 27
19	FILL 2 20	FILL 2 21	FILL 2 22	FILL 2 23
20	FILL 1 26	FILL 1 27	FILL 1 28	FILL 1 29
21	FILL 1 22	FILL 1 23	FILL 1 24	FILL 1 25
22	BKGD A 18	BKGD A 19	FILL 1 20	FILL 1 21
23	BKGD A 14	BKGD A 15	BKGD A 16	BKGD A 17
24	BKGD A 10	BKGD A 11	BKGD A 12	BKGD A 13
25	BKGD B 16	BKGD B 17	BKGD B 18	BKGD B 19
26	BKGD B 12	BKGD B 13	BKGD B 14	BKGD B 15
27	FILL 2 18	FILL 2 19	BKGD B 10	BKGD B 11
28	FILL 2 14	FILL 2 15	FILL 2 16	FILL 2 17
29	FILL 2 10	FILL 2 11	FILL 2 12	FILL 2 13
30	FILL 1 16	FILL 1 17	FILL 1 18	FILL 1 19
31	GND	GND	FILL 1 14	FILL 1 15
32	GND	GND	FILL 1 12	FILL 1 13

	A	B	C
1	GND	GND	GND
2	MASK 39	FILL 1 10	FILL 1 11
3	MASK 36	MASK 37	MASK 38
4	MASK 33	MASK 34	MASK 35
5	MASK 30	MASK 31	MASK 32
6	MASK 27	MASK 28	MASK 29
7	MASK 24	MASK 25	MASK 26
8	MASK 21	MASK 22	MASK 23
9	MASK 18	MASK 19	MASK 20
10	MASK 15	MASK 16	MASK 17
11	MASK 12	MASK 13	MASK 14
12		MASK 10	MASK 11
13			
14			
15			
16			
17			
18		INPUT 38	
19			
20		INPUT 37	
21			
22		INPUT 36	
23			
24		INPUT 35	
25			
26		INPUT 34	
27			
28		INPUT 33	
29			
30		INPUT 32	
31			
32		INPUT 31	

17

PRI INPUT 3

(1F)

XPT-1

X

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	VCNT A6	VCNT A7	FLD RST	CK16 (13.5M)
10	VCNT A5	VCNT A4	VCNT A3	CK8 (27.0M)
11	AUX1 6	AUX1 7	AUX1 8	AUX1 9
12	AUX1 2	AUX1 3	AUX1 4	AUX1 5
13	AUX4 8	AUX4 9	AUX1 0	AUX1 1
14	AUX4 4	AUX4 5	AUX4 6	AUX4 7
15	AUX4 0	AUX4 1	AUX4 2	AUX4 3
16	PVW 6	PVW 7	PVW 8	PVW 9
17	PVW 2	PVW 3	PVW 4	PVW 5
18	AUX2 8	AUX2 9	PVW 0	PVW 1
19	AUX2 4	AUX2 5	AUX2 6	AUX2 7
20	AUX2 0	AUX2 1	AUX2 2	AUX2 3
21	AUX3 6	AUX3 7	AUX3 8	AUX3 9
22	AUX3 2	AUX3 3	AUX3 4	AUX3 5
23	BKGD A D8	BKGD A D9	AUX3 0	AUX3 1
24	BKGD A D4	BKGD A D5	BKGD A D6	BKGD A D7
25	BKGD A D0	BKGD A D1	BKGD A D2	BKGD A D3
26	BKGD B D6	BKGD B D7	BKGD B D8	BKGD B D9
27	BKGD B D2	BKGD B D3	BKGD B D4	BKGD B D5
28	FILL D8	FILL D9	BKGD B D0	BKGD B D1
29	FILL D4	FILL D5	FILL D6	FILL D7
30	FILL D0	FILL D1	FILL D2	FILL D3
31	GND	GND	KYSR 2 18	KYSR 2 19
32	GND	GND	KYSR 2 16	KYSR 2 17

Y

	A	B	C	D
1	KYSR 2 12	KYSR 2 13	KYSR 2 14	KYSR 2 15
2	KYSR 1 18	KYSR 1 19	KYSR 2 10	KYSR 2 11
3	KYSR 1 14	KYSR 1 15	KYSR 1 16	KYSR 1 17
4	KYSR 1 10	KYSR 1 11	KYSR 1 12	KYSR 1 13
5	KYSR D6	KYSR D7	KYSR D8	KYSR D9
6	KYSR D2	KYSR D3	KYSR D4	KYSR D5
7	KYSR 2 28	KYSR 2 29	KYSR D0	KYSR D1
8	KYSR 2 24	KYSR 2 25	KYSR 2 26	KYSR 2 27
9	KYSR 2 20	KYSR 2 21	KYSR 2 22	KYSR 2 23
10	KYSR 1 26	KYSR 1 27	KYSR 1 28	KYSR 1 29
11	KYSR 1 22	KYSR 1 23	KYSR 1 24	KYSR 1 25
12	BKGD A 28	BKGD A 29	KYSR 1 20	KYSR 1 21
13	BKGD A 24	BKGD A 25	BKGD A 26	BKGD A 27
14	BKGD A 20	BKGD A 21	BKGD A 22	BKGD A 23
15	BKGD B 26	BKGD B 27	BKGD B 28	BKGD B 29
16	BKGD B 22	BKGD B 23	BKGD B 24	BKGD B 25
17	FILL 2 28	FILL 2 29	BKGD B 20	BKGD B 21
18	FILL 2 24	FILL 2 25	FILL 2 26	FILL 2 27
19	FILL 2 20	FILL 2 21	FILL 2 22	FILL 2 23
20	FILL 1 26	FILL 1 27	FILL 1 28	FILL 1 29
21	FILL 1 22	FILL 1 23	FILL 1 24	FILL 1 25
22	BKGD A 18	BKGD A 19	FILL 1 20	FILL 1 21
23	BKGD A 14	BKGD A 15	BKGD A 16	BKGD A 17
24	BKGD A 10	BKGD A 11	BKGD A 12	BKGD A 13
25	BKGD B 16	BKGD B 17	BKGD B 18	BKGD B 19
26	BKGD B 12	BKGD B 13	BKGD B 14	BKGD B 15
27	FILL 2 18	FILL 2 19	BKGD B 10	BKGD B 11
28	FILL 2 14	FILL 2 15	FILL 2 16	FILL 2 17
29	FILL 2 10	FILL 2 11	FILL 2 12	FILL 2 13
30	FILL 1 16	FILL 1 17	FILL 1 18	FILL 1 19
31	GND	GND	FILL 1 14	FILL 1 15
32	GND	GND	FILL 1 12	FILL 1 13

Z

	A	B	C
1	GND	GND	GND
2	MASK 39	FILL 1 10	FILL 1 11
3	MASK 36	MASK 37	MASK 38
4	MASK 33	MASK 34	MASK 35
5	MASK 30	MASK 31	MASK 32
6	MASK 27	MASK 28	MASK 29
7	MASK 24	MASK 25	MASK 26
8	MASK 21	MASK 22	MASK 23
9	MASK 18	MASK 19	MASK 20
10	MASK 15	MASK 16	MASK 17
11	MASK 12	MASK 13	MASK 14
12		MASK 10	MASK 11
13			
14			
15			
16			
17			
18		INPUT 48	
19			
20		INPUT 47	
21			
22		INPUT 46	
23			
24		INPUT 45	
25			
26		INPUT 44	
27			
28		INPUT 43	
29			
30		INPUT 42	
31			
32		INPUT 41	

18

PRI INPUT 4

MB-245 (5/5)
1-636-516-12
DVS-8000

B-SYX121-MB-D1#53

MB-245 (5/5) MOTHER BOARD

S/N; 10061 and higher

(1E)

XPT-1

X

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK16 (13.5M)
10	GND	GND	GND	CK8 (27.0M)
11	AUX1 6	AUX1 7	AUX1 8	AUX1 9
12	AUX1 2	AUX1 3	AUX1 4	AUX1 5
13	AUX4 8	AUX4 9	AUX1 0	AUX1 1
14	AUX4 4	AUX4 5	AUX4 6	AUX4 7
15	AUX4 0	AUX4 1	AUX4 2	AUX4 3
16	PVW 6	PVW 7	PVW 8	PVW 9
17	PVW 2	PVW 3	PVW 4	PVW 5
18	AUX2 8	AUX2 9	PVW 0	PVW 1
19	AUX2 4	AUX2 5	AUX2 6	AUX2 7
20	AUX2 0	AUX2 1	AUX2 2	AUX2 3
21	AUX3 6	AUX3 7	AUX3 8	AUX3 9
22	AUX3 2	AUX3 3	AUX3 4	AUX3 5
23	BKGD A D8	BKGD A D9	AUX3 0	AUX3 1
24	BKGD A D4	BKGD A D5	BKGD A D6	BKGD A D7
25	BKGD A D0	BKGD A D1	BKGD A D2	BKGD A D3
26	BKGD B D6	BKGD B D7	BKGD B D8	BKGD B D9
27	BKGD B D2	BKGD B D3	BKGD B D4	BKGD B D5
28	FILL D8	FILL D9	BKGD B D0	BKGD B D1
29	FILL D4	FILL D5	FILL D6	FILL D7
30	FILL D0	FILL D1	FILL D2	FILL D3
31	GND	GND	KYSR 2 18	KYSR 2 19
32	GND	GND	KYSR 2 16	KYSR 2 17

Y

	A	B	C	D
1	KYSR 2 12	KYSR 2 13	KYSR 2 14	KYSR 2 15
2	KYSR 1 18	KYSR 1 19	KYSR 2 10	KYSR 2 11
3	KYSR 1 14	KYSR 1 15	KYSR 1 16	KYSR 1 17
4	KYSR 1 10	KYSR 1 11	KYSR 1 12	KYSR 1 13
5	KYSR D6	KYSR D7	KYSR D8	KYSR D9
6	KYSR D2	KYSR D3	KYSR D4	KYSR D5
7	KYSR 2 28	KYSR 2 29	KYSR D0	KYSR D1
8	KYSR 2 24	KYSR 2 25	KYSR 2 26	KYSR 2 27
9	KYSR 2 20	KYSR 2 21	KYSR 2 22	KYSR 2 23
10	KYSR 1 26	KYSR 1 27	KYSR 1 28	KYSR 1 29
11	KYSR 1 22	KYSR 1 23	KYSR 1 24	KYSR 1 25
12	BKGD A 28	BKGD A 29	KYSR 1 20	KYSR 1 21
13	BKGD A 24	BKGD A 25	BKGD A 26	BKGD A 27
14	BKGD A 20	BKGD A 21	BKGD A 22	BKGD A 23
15	BKGD B 26	BKGD B 27	BKGD B 28	BKGD B 29
16	BKGD B 22	BKGD B 23	BKGD B 24	BKGD B 25
17	FILL 2 28	FILL 2 29	BKGD B 20	BKGD B 21
18	FILL 2 24	FILL 2 25	FILL 2 26	FILL 2 27
19	FILL 2 20	FILL 2 21	FILL 2 22	FILL 2 23
20	FILL 1 26	FILL 1 27	FILL 1 28	FILL 1 29
21	FILL 1 22	FILL 1 23	FILL 1 24	FILL 1 25
22	BKGD A 18	BKGD A 19	FILL 1 20	FILL 1 21
23	BKGD A 14	BKGD A 15	BKGD A 16	BKGD A 17
24	BKGD A 10	BKGD A 11	BKGD A 12	BKGD A 13
25	BKGD B 16	BKGD B 17	BKGD B 18	BKGD B 19
26	BKGD B 12	BKGD B 13	BKGD B 14	BKGD B 15
27	FILL 2 18	FILL 2 19	BKGD B 10	BKGD B 11
28	FILL 2 14	FILL 2 15	FILL 2 16	FILL 2 17
29	FILL 2 10	FILL 2 11	FILL 2 12	FILL 2 13
30	FILL 1 16	FILL 1 17	FILL 1 18	FILL 1 19
31	GND	GND	FILL 1 14	FILL 1 15
32	GND	GND	FILL 1 12	FILL 1 13

Z

	A	B	C
1	GND	GND	GND
2	MASK 39	FILL 1 10	FILL 1 11
3	MASK 36	MASK 37	MASK 38
4	MASK 33	MASK 34	MASK 35
5	MASK 30	MASK 31	MASK 32
6	MASK 27	MASK 28	MASK 29
7	MASK 24	MASK 25	MASK 26
8	MASK 21	MASK 22	MASK 23
9	MASK 18	MASK 19	MASK 20
10	MASK 15	MASK 16	MASK 17
11	MASK 12	MASK 13	MASK 14
12	GND	MASK 10	MASK 11
13	GND	GND	GND
14	GND	GND	GND
15	GND	GND	GND
16	GND	GND	GND
17	GND	GND	GND
18	GND	INPUT 38	GND
19	GND	GND	GND
20	GND	INPUT 37	GND
21	GND	GND	GND
22	GND	INPUT 36	GND
23	GND	GND	GND
24	GND	INPUT 35	GND
25	GND	GND	GND
26	GND	INPUT 34	GND
27	GND	GND	GND
28	GND	INPUT 33	GND
29	GND	GND	GND
30	GND	INPUT 32	GND
31	GND	GND	GND
32	GND	INPUT 31	GND

17

PRI INPUT 3

(1F)

XPT-1

X

	A	B	C	D
1	+5V	RDATA : L	RDATA : H	-5V
2	+5V	WDATA : L	WDATA : H	-5V
3	+5V	ADD : L	ADD : H	FUSE -
4	+5V	CKD : L	CKD : H	CKX
5	FUSE +	RST	LALT	VD
6	THERMO	SC	HBLK	HZ
7	SLTAD 1	SLTAD 2	SLTAD 3	SLTAD 4
8	SLTAD 0	CF	VBLK	OE
9	GND	GND	GND	CK16 (13.5M)
10	GND	GND	GND	CK8 (27.0M)
11	AUX1 6	AUX1 7	AUX1 8	AUX1 9
12	AUX1 2	AUX1 3	AUX1 4	AUX1 5
13	AUX4 8	AUX4 9	AUX1 0	AUX1 1
14	AUX4 4	AUX4 5	AUX4 6	AUX4 7
15	AUX4 0	AUX4 1	AUX4 2	AUX4 3
16	PVW 6	PVW 7	PVW 8	PVW 9
17	PVW 2	PVW 3	PVW 4	PVW 5
18	AUX2 8	AUX2 9	PVW 0	PVW 1
19	AUX2 4	AUX2 5	AUX2 6	AUX2 7
20	AUX2 0	AUX2 1	AUX2 2	AUX2 3
21	AUX3 6	AUX3 7	AUX3 8	AUX3 9
22	AUX3 2	AUX3 3	AUX3 4	AUX3 5
23	BKGD A D8	BKGD A D9	AUX3 0	AUX3 1
24	BKGD A D4	BKGD A D5	BKGD A D6	BKGD A D7
25	BKGD A D0	BKGD A D1	BKGD A D2	BKGD A D3
26	BKGD B D6	BKGD B D7	BKGD B D8	BKGD B D9
27	BKGD B D2	BKGD B D3	BKGD B D4	BKGD B D5
28	FILL D8	FILL D9	BKGD B D0	BKGD B D1
29	FILL D4	FILL D5	FILL D6	FILL D7
30	FILL D0	FILL D1	FILL D2	FILL D3
31	GND	GND	KYSR 2 18	KYSR 2 19
32	GND	GND	KYSR 2 16	KYSR 2 17

Y

	A	B	C	D
1	KYSR 2 12	KYSR 2 13	KYSR 2 14	KYSR 2 15
2	KYSR 1 18	KYSR 1 19	KYSR 2 10	KYSR 2 11
3	KYSR 1 14	KYSR 1 15	KYSR 1 16	KYSR 1 17
4	KYSR 1 10	KYSR 1 11	KYSR 1 12	KYSR 1 13
5	KYSR D6	KYSR D7	KYSR D8	KYSR D9
6	KYSR D2	KYSR D3	KYSR D4	KYSR D5
7	KYSR 2 28	KYSR 2 29	KYSR D0	KYSR D1
8	KYSR 2 24	KYSR 2 25	KYSR 2 26	KYSR 2 27
9	KYSR 2 20	KYSR 2 21	KYSR 2 22	KYSR 2 23
10	KYSR 1 26	KYSR 1 27	KYSR 1 28	KYSR 1 29
11	KYSR 1 22	KYSR 1 23	KYSR 1 24	KYSR 1 25
12	BKGD A 28	BKGD A 29	KYSR 1 20	KYSR 1 21
13	BKGD A 24	BKGD A 25	BKGD A 26	BKGD A 27
14	BKGD A 20	BKGD A 21	BKGD A 22	BKGD A 23
15	BKGD B 26	BKGD B 27	BKGD B 28	BKGD B 29
16	BKGD B 22	BKGD B 23	BKGD B 24	BKGD B 25
17	FILL 2 28	FILL 2 29	BKGD B 20	BKGD B 21
18	FILL 2 24	FILL 2 25	FILL 2 26	FILL 2 27
19	FILL 2 20	FILL 2 21	FILL 2 22	FILL 2 23
20	FILL 1 26	FILL 1 27	FILL 1 28	FILL 1 29
21	FILL 1 22	FILL 1 23	FILL 1 24	FILL 1 25
22	BKGD A 18	BKGD A 19	FILL 1 20	FILL 1 21
23	BKGD A 14	BKGD A 15	BKGD A 16	BKGD A 17
24	BKGD A 10	BKGD A 11	BKGD A 12	BKGD A 13
25	BKGD B 16	BKGD B 17	BKGD B 18	BKGD B 19
26	BKGD B 12	BKGD B 13	BKGD B 14	BKGD B 15
27	FILL 2 18	FILL 2 19	BKGD B 10	BKGD B 11
28	FILL 2 14	FILL 2 15	FILL 2 16	FILL 2 17
29	FILL 2 10	FILL 2 11	FILL 2 12	FILL 2 13
30	FILL 1 16	FILL 1 17	FILL 1 18	FILL 1 19
31	GND	GND	FILL 1 14	FILL 1 15
32	GND	GND	FILL 1 12	FILL 1 13

Z

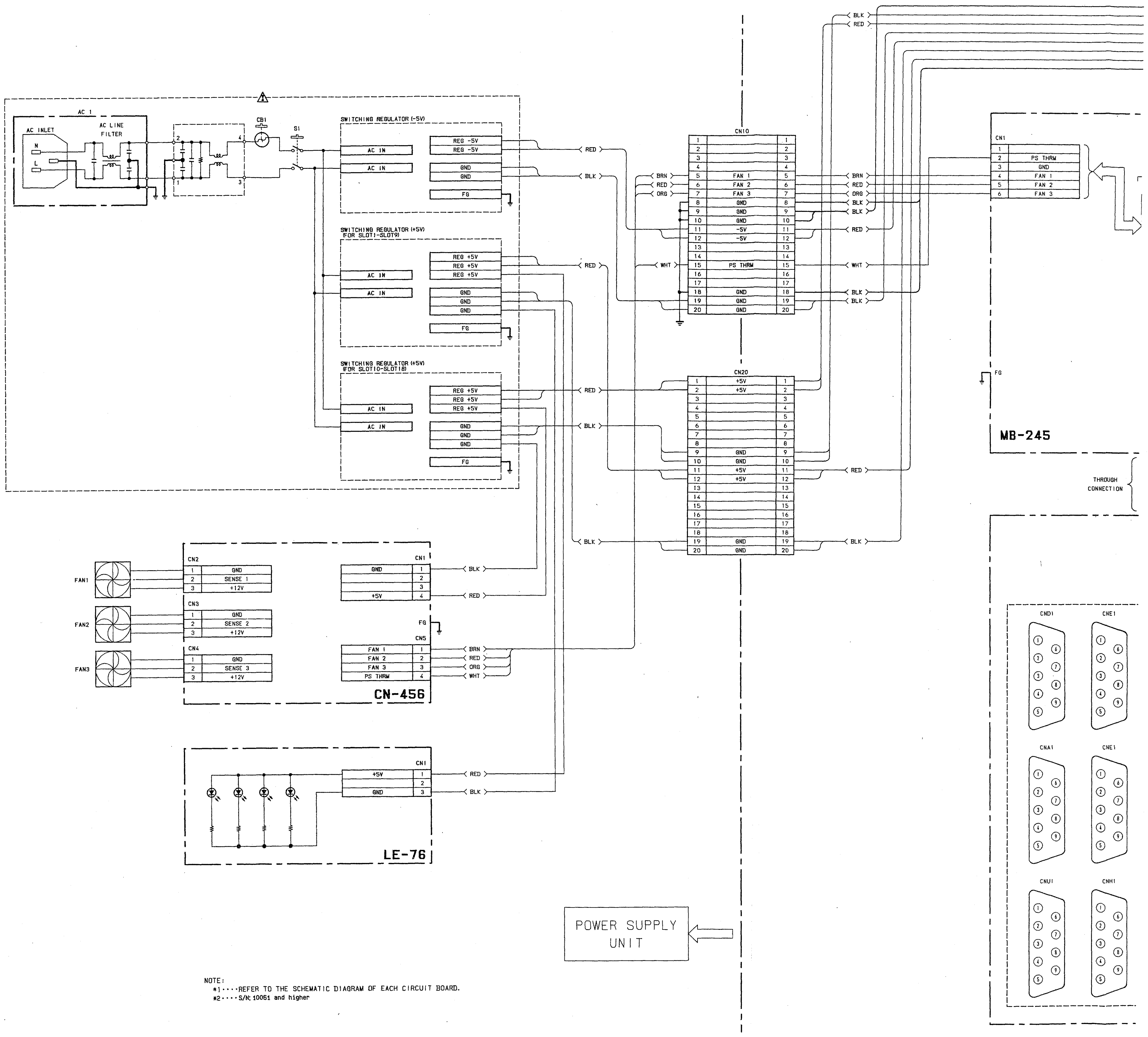
	A	B	C
1	GND	GND	GND
2	MASK 39	FILL 1 10	FILL 1 11
3	MASK 36	MASK 37	MASK 38
4	MASK 33	MASK 34	MASK 35
5	MASK 30	MASK 31	MASK 32
6	MASK 27	MASK 28	MASK 29
7	MASK 24	MASK 25	MASK 26
8	MASK 21	MASK 22	MASK 23
9	MASK 18	MASK 19	MASK 20
10	MASK 15	MASK 16	MASK 17
11	MASK 12	MASK 13	MASK 14
12	GND	MASK 10	MASK 11
13	GND	GND	GND
14	GND	GND	GND
15	GND	GND	GND
16	GND	GND	GND
17	GND	GND	GND
18	GND	INPUT 48	GND
19	GND	GND	GND
20	GND	INPUT 47	GND
21	GND	GND	GND
22	GND	INPUT 46	GND
23	GND	GND	GND
24	GND	INPUT 45	GND
25	GND	GND	GND
26	GND	INPUT 44	GND
27	GND	GND	GND
28	GND	INPUT 43	GND
29	GND	GND	GND
30	GND	INPUT 42	GND
31	GND	GND	GND
32	GND	INPUT 41	GND

18

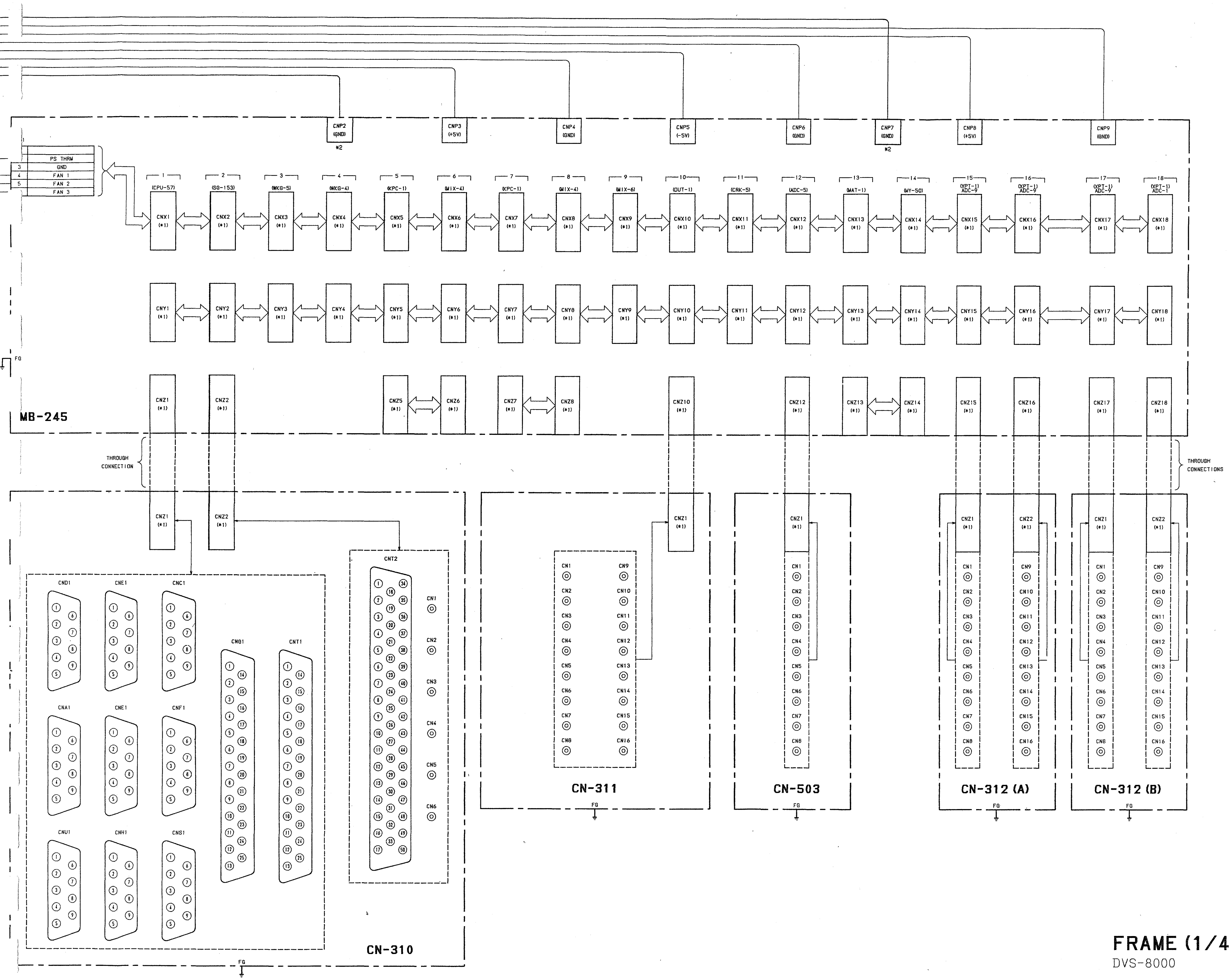
PRI INPUT 4

MB-245 (5/5)
1-636-516-13
DVS-8000

FRAME (1/4)


AC 1
AC INLET
AC LINE FILTER
N
L
CB1
S1
SWITCHING REGULATOR (-5V)
AC IN
REG -5V
GND
FG
SWITCHING REGULATOR (+5V) (FOR SLOT1-SLOT9)
REG +5V
SWITCHING REGULATOR (+5V) (FOR SLOT10-SLOT18)
CN10
FAN 1
FAN 2
FAN 3
-5V
PS THRM
CN20
+5V
RED
BLK
BRN
ORG
WHT
CN1
MB-245
THROUGH CONNECTION
CND1
CNE1
CNA1
CNU1
CNH1
FAN1
FAN2
FAN3
CN2
CN3
CN4
CN5
SENSE 1
SENSE 2
SENSE 3
+12V
CN-456
LE-76
POWER SUPPLY UNIT

NOTE:
*1····REFER TO THE SCHEMATIC DIAGRAM OF EACH CIRCUIT BOARD.
*2····S/N; 10061 and higher

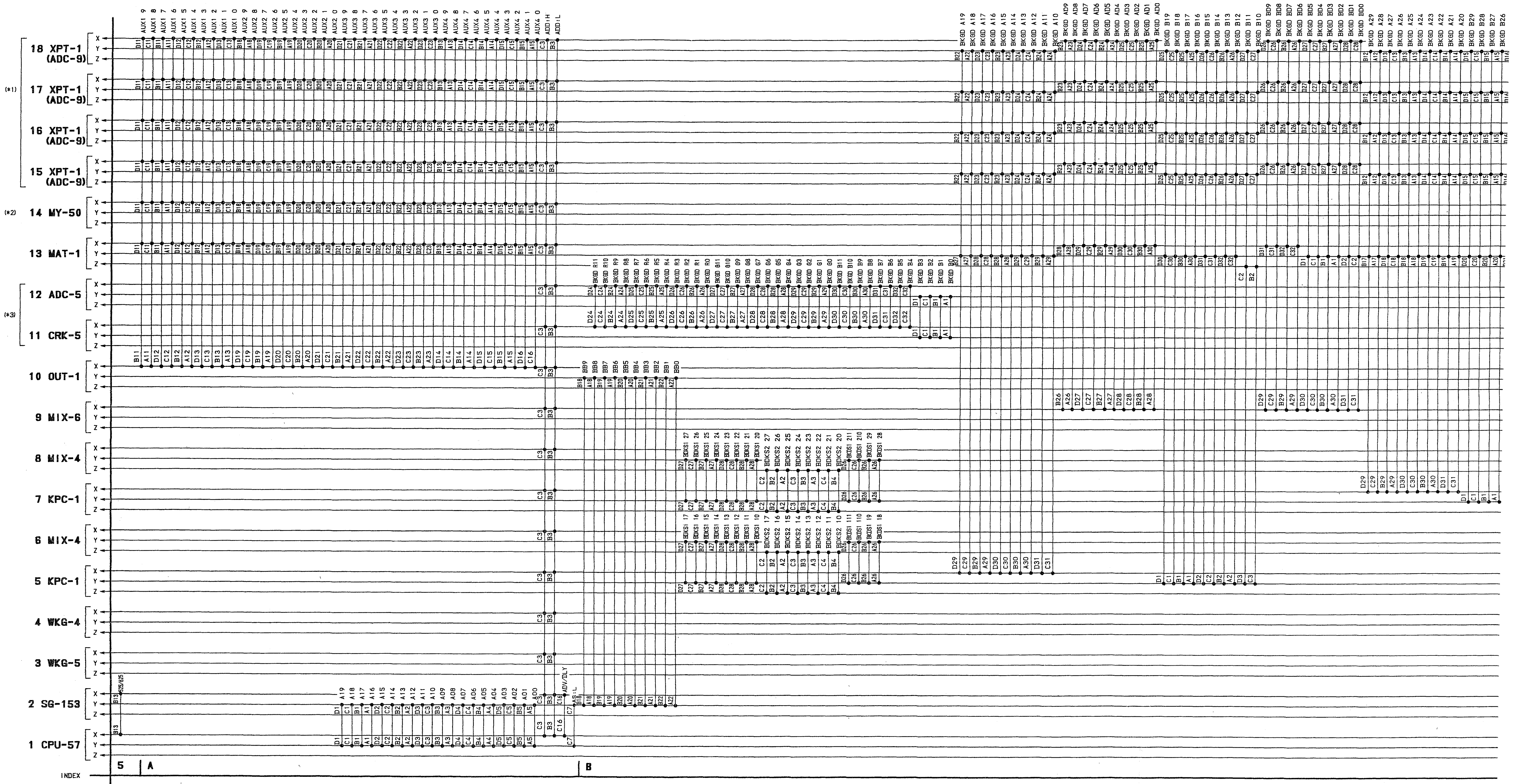

CNP2 (GND) *2
CNP3 (+5V)
CNP4 (GND)
CNP5 (-5V)
CNP6 (GND)
CNP7 (GND) *2
CNP8 (+5V)
CNP9 (GND)
PS THRM
3 GND
4 FAN 1
5 FAN 2
FAN 3
1 (CPU-57)
2 (SG-153)
3 (WKG-5)
4 (WKG-4)
5 (KPC-1)
6 (MIX-4)
7 (KPC-1)
8 (MIX-4)
9 (MIX-6)
10 (OUT-1)
11 (CRK-5)
12 (ADC-5)
13 (MAT-1)
14 (WY-50)
15 (XPT-1) ADC-9
16 (XPT-1) ADC-9
17 (XPT-1) ADC-9
18 (XPT-1) ADC-1
CNX1 (*1)
CNX2 (*1)
CNX3 (*1)
CNX4 (*1)
CNX5 (*1)
CNX6 (*1)
CNX7 (*1)
CNX8 (*1)
CNX9 (*1)
CNX10 (*1)
CNX11 (*1)
CNX12 (*1)
CNX13 (*1)
CNX14 (*1)
CNX15 (*1)
CNX16 (*1)
CNX17 (*1)
CNX18 (*1)
CNY1 (*1)
CNY2 (*1)
CNY3 (*1)
CNY4 (*1)
CNY5 (*1)
CNY6 (*1)
CNY7 (*1)
CNY8 (*1)
CNY9 (*1)
CNY10 (*1)
CNY11 (*1)
CNY12 (*1)
CNY13 (*1)
CNY14 (*1)
CNY15 (*1)
CNY16 (*1)
CNY17 (*1)
CNY18 (*1)
FG
CNZ1 (*1)
CNZ2 (*1)
CNZ5 (*1)
CNZ6 (*1)
CNZ7 (*1)
CNZ8 (*1)
CNZ10 (*1)
CNZ12 (*1)
CNZ13 (*1)
CNZ14 (*1)
CNZ15 (*1)
CNZ16 (*1)
CNZ17 (*1)
CNZ18 (*1)
MB-245
THROUGH CONNECTION
THROUGH CONNECTIONS
CNZ1 (*1)
CNZ2 (*1)
CND1
CNE1
CNC1
CNA1
CNE1
CNF1
CNU1
CNH1
CNS1
CNG1
CNT1
CNT2
CN1
CN2
CN3
CN4
CN5
CN6
CN-310
FG
CNZ1 (*1)
CN1 CN2 CN3 CN4 CN5 CN6 CN7 CN8
CN9 CN10 CN11 CN12 CN13 CN14 CN15 CN16
CN-311
FG
CNZ1 (*1)
CN1 CN2 CN3 CN4 CN5 CN6 CN7 CN8
CN-503
FG
CNZ1 (*1)
CNZ2 (*1)
CN1 CN2 CN3 CN4 CN5 CN6 CN7 CN8
CN9 CN10 CN11 CN12 CN13 CN14 CN15 CN16
CN-312 (A)
FG
CNZ1 (*1)
CNZ2 (*1)
CN1 CN2 CN3 CN4 CN5 CN6 CN7 CN8
CN9 CN10 CN11 CN12 CN13 CN14 CN15 CN16
CN-312 (B)
FG

FRAME (1/4)

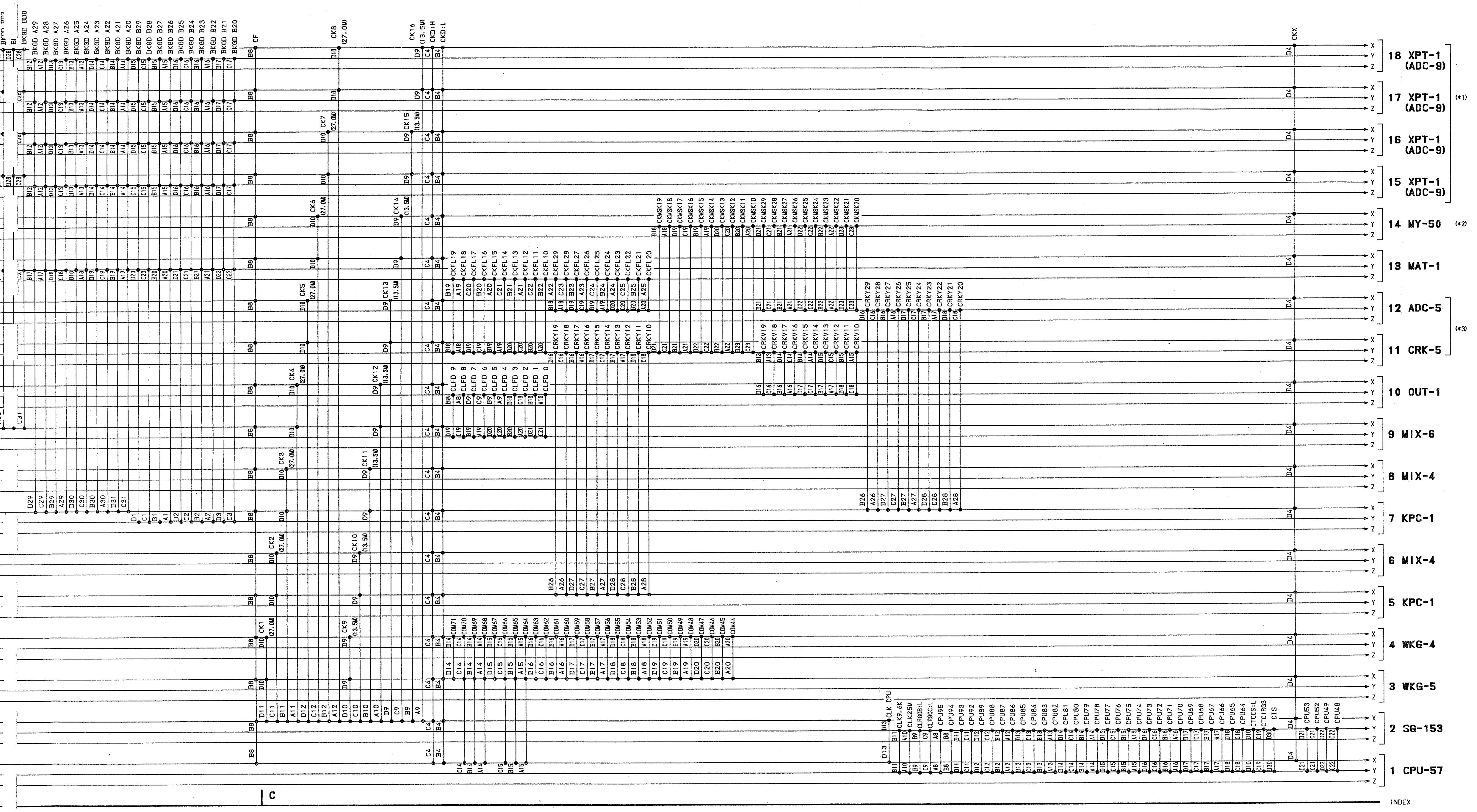
DVS-8000

1
2
3
4
5

FRAME (2/4)


18 XPT-1 (ADC-9)
(*1) 17 XPT-1 (ADC-9)
16 XPT-1 (ADC-9)
15 XPT-1 (ADC-9)
(*2) 14 MY-50
13 MAT-1
12 ADC-5
(*3) 11 CRK-5
10 OUT-1
9 MIX-6
8 MIX-4
7 KPC-1
6 MIX-4
5 KPC-1
4 WKG-4
3 WKG-5
2 SG-153
1 CPU-57
X
Y
Z
INDEX
5
A
B
AUX1 9
AUX4 0
ADD-H
ADD-L
BKGD A19
BKGD B26
BKDS1 27
BKDS2 20
ADV/DLY

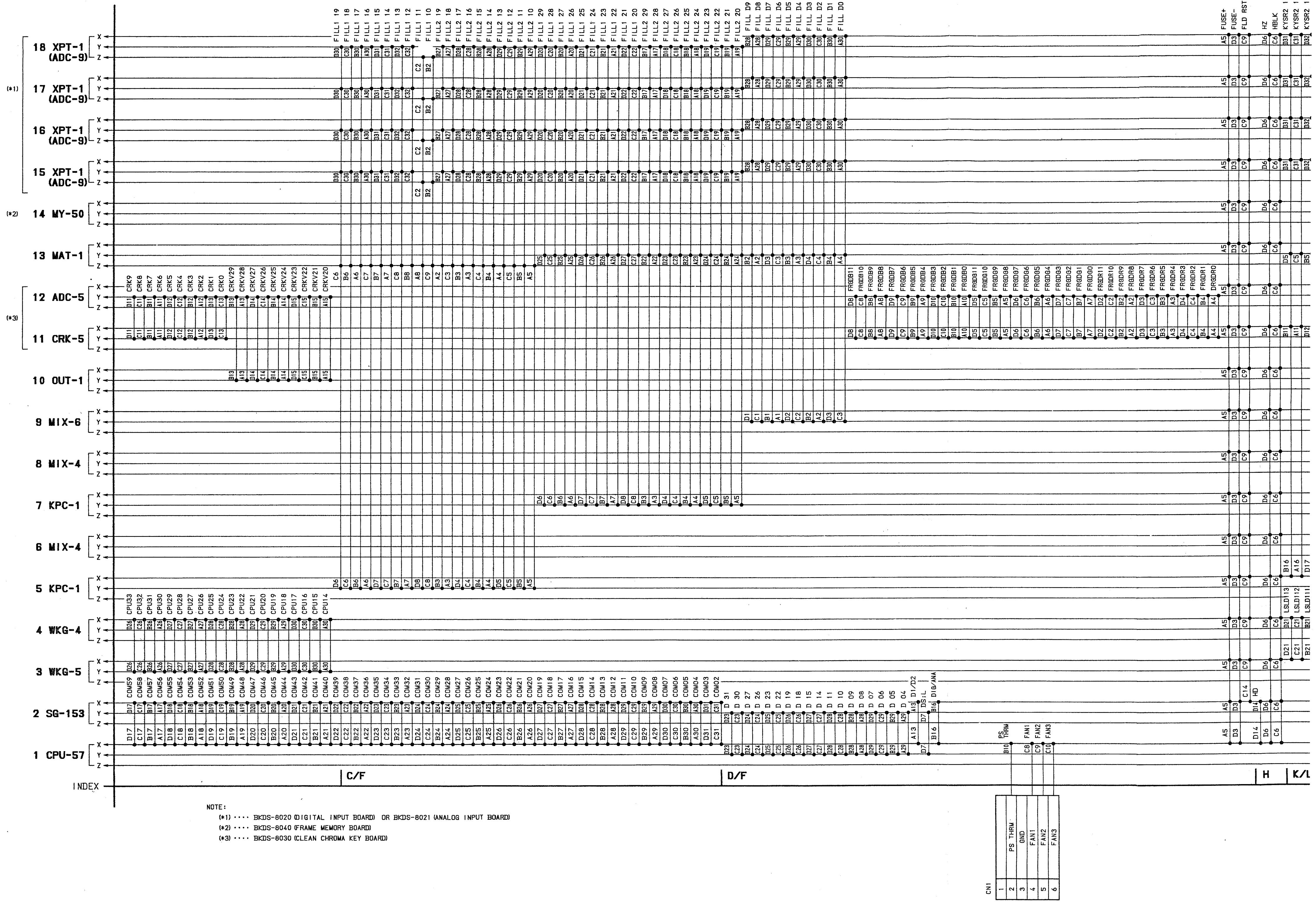
NOTE:
(*1) ····BKDS-8020 (DIGITAL INPUT BOARD) OR BKDS-8021 (ANALOG INPUT BOARD)
(*2) ····BKDS-8040 (FRAME MEMORY BOARD)
(*3) ····BKDS-8030 (CLEAN CHROMA KEY BOARD)


18 XPT-1 (ADC-9)
17 XPT-1 (ADC-9)
(*1)
16 XPT-1 (ADC-9)
15 XPT-1 (ADC-9)
14 MY-50
(*2)
13 MAT-1
12 ADC-5
(*3)
11 CRK-5
10 OUT-1
9 MIX-6
8 MIX-4
7 KPC-1
6 MIX-4
5 KPC-1
4 WKG-4
3 WKG-5
2 SG-153
1 CPU-57
INDEX
C
CKX
CF
CK8 (27.0M)
CK16 (13.5M)
CKD:H
CKD:L
CK7 (27.0M)
CK15 (13.5M)
CK6 (27.0M)
CK14 (13.5M)
CK5 (27.0M)
CK13 (13.5M)
CK4 (27.0M)
CK12 (13.5M)
CK3 (27.0M)
CK11 (13.5M)
CK2 (27.0M)
CK10 (13.5M)
CK1 (27.0M)
CK9 (13.5M)
CLK CPU
CLK9.6K
CLK25M

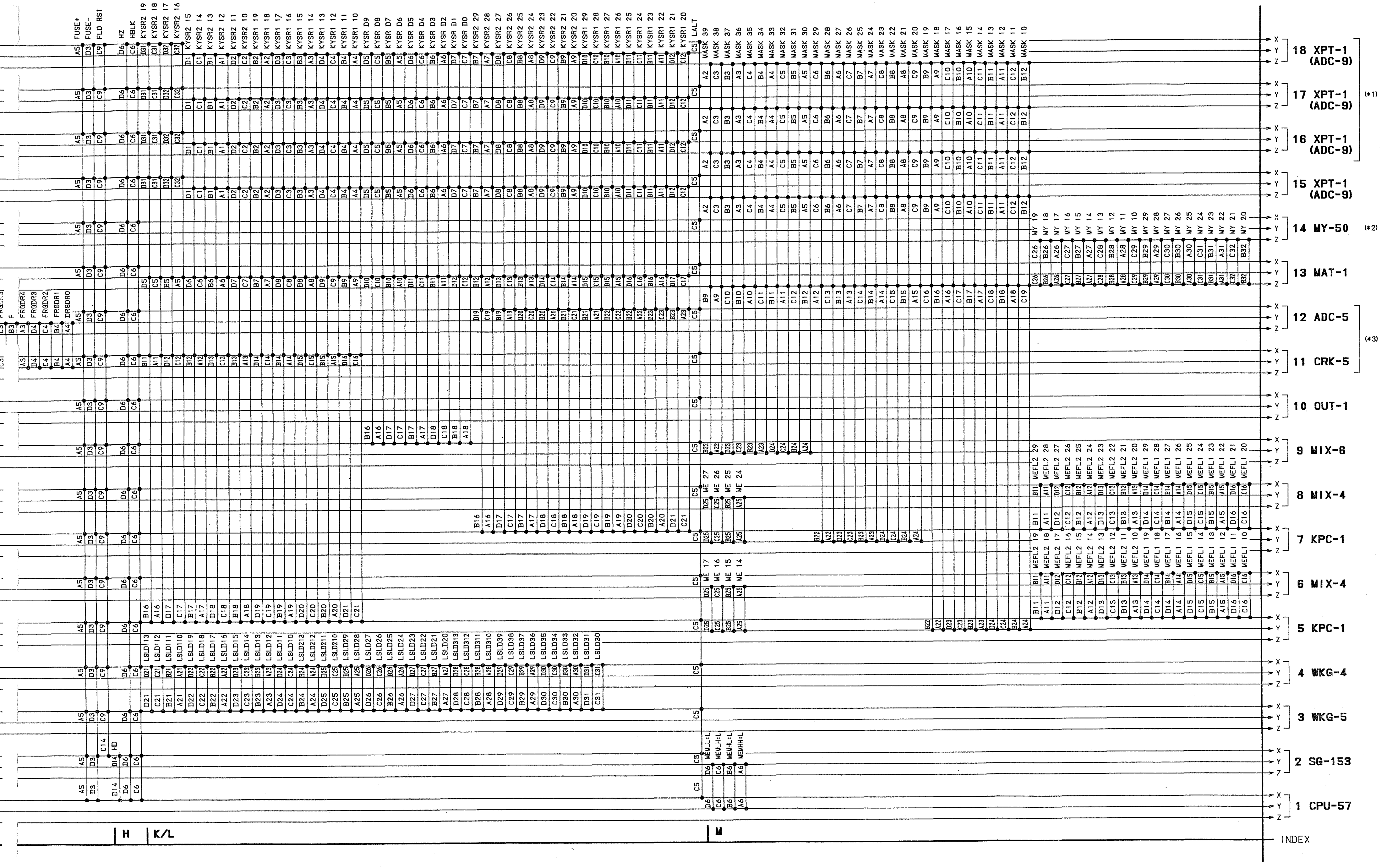
FRAME (2/4)

DVS-8000

FRAME (3/4)


18 XPT-1 (ADC-9)
17 XPT-1 (ADC-9)
16 XPT-1 (ADC-9)
15 XPT-1 (ADC-9)
14 MY-50
13 MAT-1
12 ADC-5
11 CRK-5
10 OUT-1
9 MIX-6
8 MIX-4
7 KPC-1
6 MIX-4
5 KPC-1
4 WKG-4
3 WKG-5
2 SG-153
1 CPU-57
(*1)
(*2)
(*3)
X
Y
Z
INDEX
C/F
D/F
H
K/L
CN1
PS THRM
GND
FAN1
FAN2
FAN3
1
2
3
4
5
6

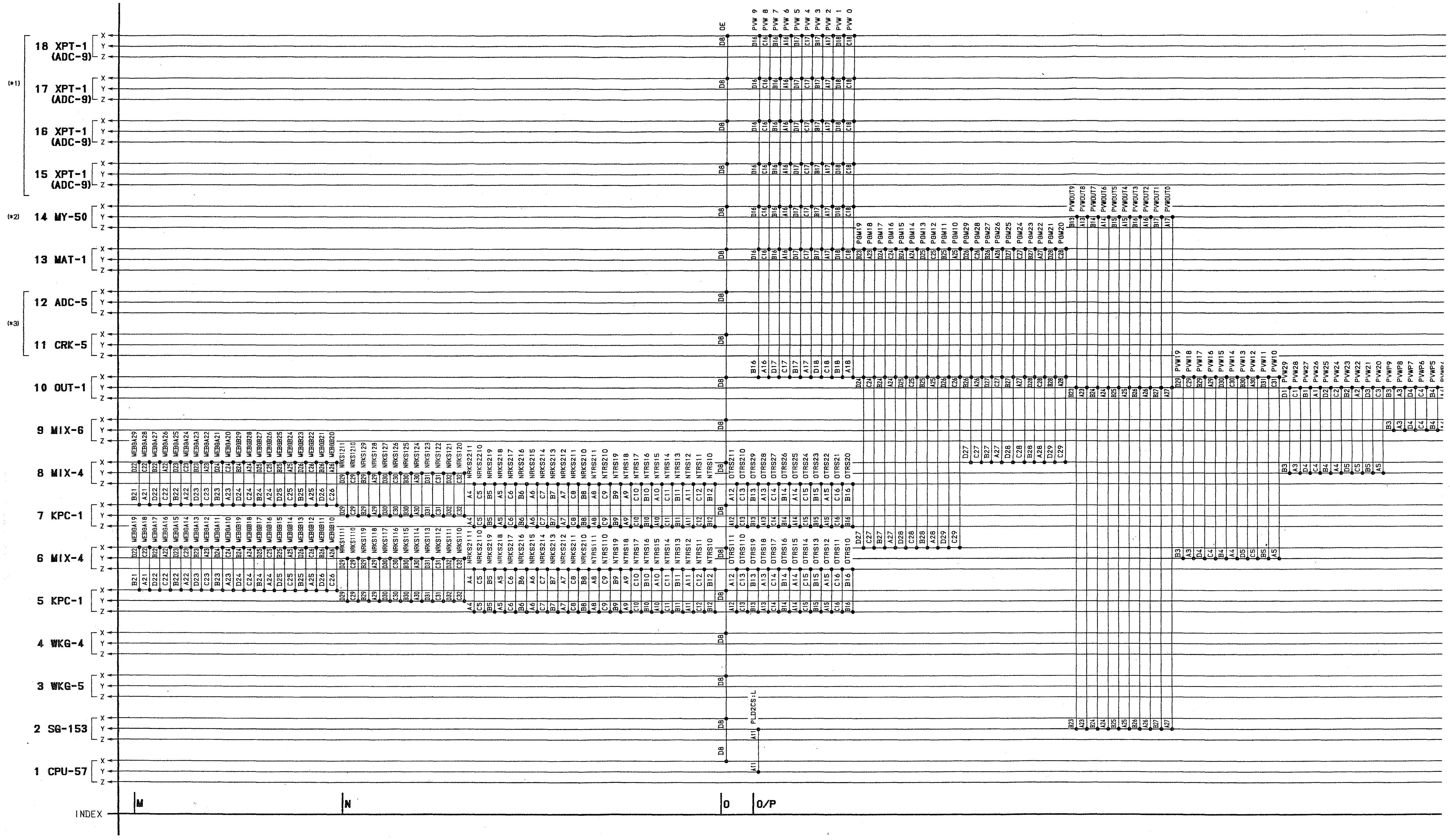
NOTE:
(*1) ···· BKDS-8020 (DIGITAL INPUT BOARD) OR BKDS-8021 (ANALOG INPUT BOARD)
(*2) ···· BKDS-8040 (FRAME MEMORY BOARD)
(*3) ···· BKDS-8030 (CLEAN CHROMA KEY BOARD)


18 XPT-1 (ADC-9)
17 XPT-1 (ADC-9)
16 XPT-1 (ADC-9)
15 XPT-1 (ADC-9)
(*1)
14 MY-50
(*2)
13 MAT-1
12 ADC-5
11 CRK-5
(*3)
10 OUT-1
9 MIX-6
8 MIX-4
7 KPC-1
6 MIX-4
5 KPC-1
4 WKG-4
3 WKG-5
2 SG-153
1 CPU-57
INDEX
H
K/L
M
FUSE+
FUSE-
FLD RST
HZ
HBLK
LALT

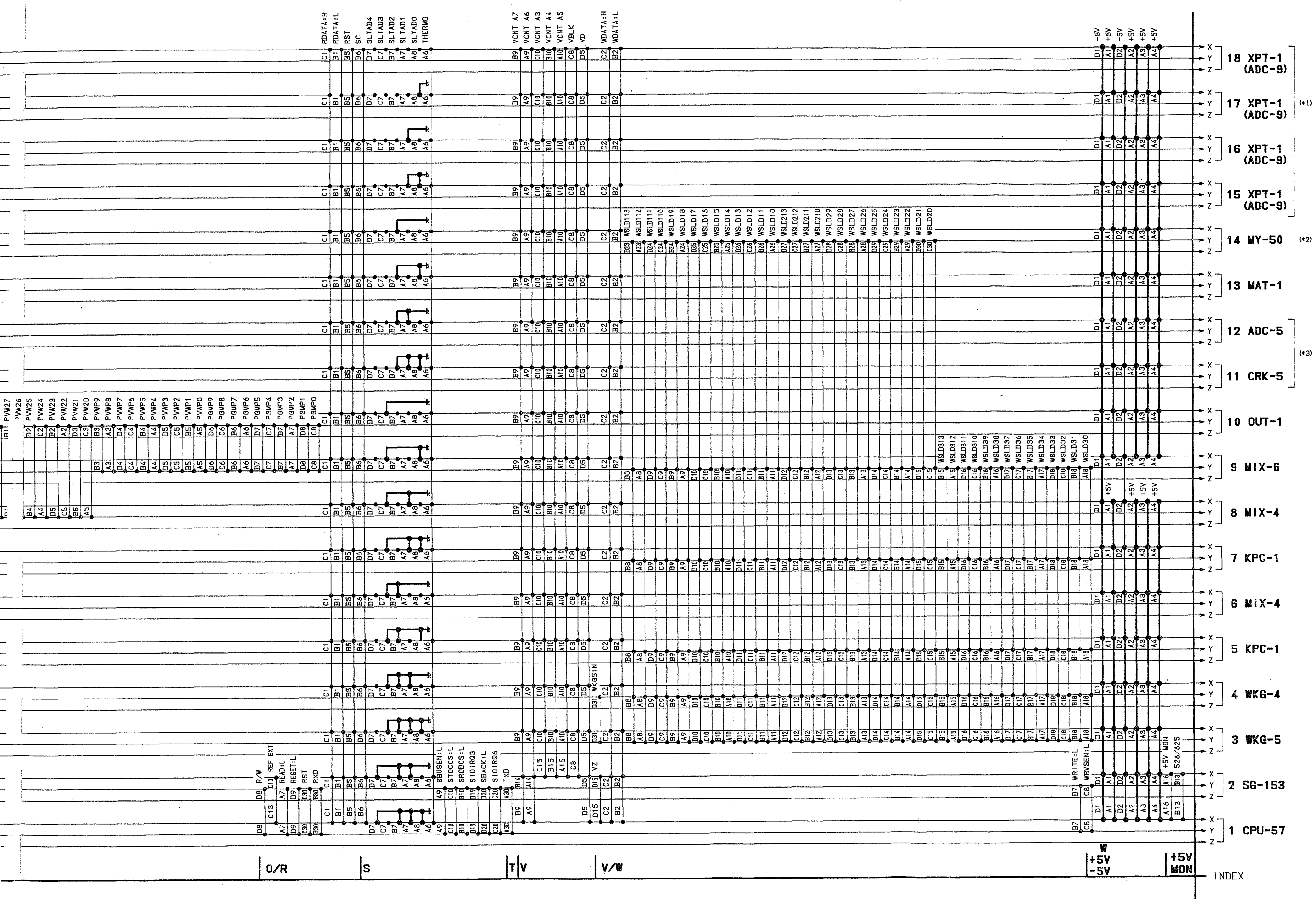
FRAME (3/4)

DVS-8000

FRAME (4/4)


18 XPT-1 (ADC-9)
17 XPT-1 (ADC-9)
16 XPT-1 (ADC-9)
15 XPT-1 (ADC-9)
(*1)
14 MY-50
(*2)
13 MAT-1
12 ADC-5
11 CRK-5
(*3)
10 OUT-1
9 MIX-6
8 MIX-4
7 KPC-1
6 MIX-4
5 KPC-1
4 WKG-4
3 WKG-5
2 SG-153
1 CPU-57
X
Y
Z
INDEX
M
N
O
O/P
OE
PVW 9
PVW 0
PVWOUT9
PVWOUT0
PGM19
PGM20
PVW19
PVW10
PVW29
PVWP9
PLDZCS:L

NOTE:
(*1) ···· BKDS-8020 (DIGITAL INPUT BOARD) OR BKDS-8021 (ANALOG INPUT BOARD)
(*2) ···· BKDS-8040 (FRAME MEMORY BOARD)
(*3) ···· BKDS-8030 (CLEAN CHROMA KEY BOARD)


RDATA:H
RDATA:L
RST
SC
SLTAD4
SLTAD3
SLTAD2
SLTAD1
SLTAD0
THERMO
VCNT A7
VCNT A6
VCNT A3
VCNT A4
VCNT A5
VBLK
VD
WDATA:H
WDATA:L
-5V
+5V
18 XPT-1 (ADC-9)
17 XPT-1 (ADC-9)
16 XPT-1 (ADC-9)
15 XPT-1 (ADC-9)
(*1)
14 MY-50
(*2)
13 MAT-1
12 ADC-5
11 CRK-5
(*3)
10 OUT-1
9 MIX-6
8 MIX-4
7 KPC-1
6 MIX-4
5 KPC-1
4 WKG-4
3 WKG-5
2 SG-153
1 CPU-57
R/W
REF EXT
READ:L
RESET:L
RST
RXD
SBUSEN:L
STOCCS:L
SRDCS:L
SIOIRQ3
SBACK:L
SIOIRQ6
TXD
VZ
WKGSIN
WRITE:L
WBVSEN:L
+5V MON
S26/625
X
Y
Z
O/R
S
T
V
V/W
W
+5V
-5V
+5V
MON
INDEX

FRAME (4/4)

DVS-8000

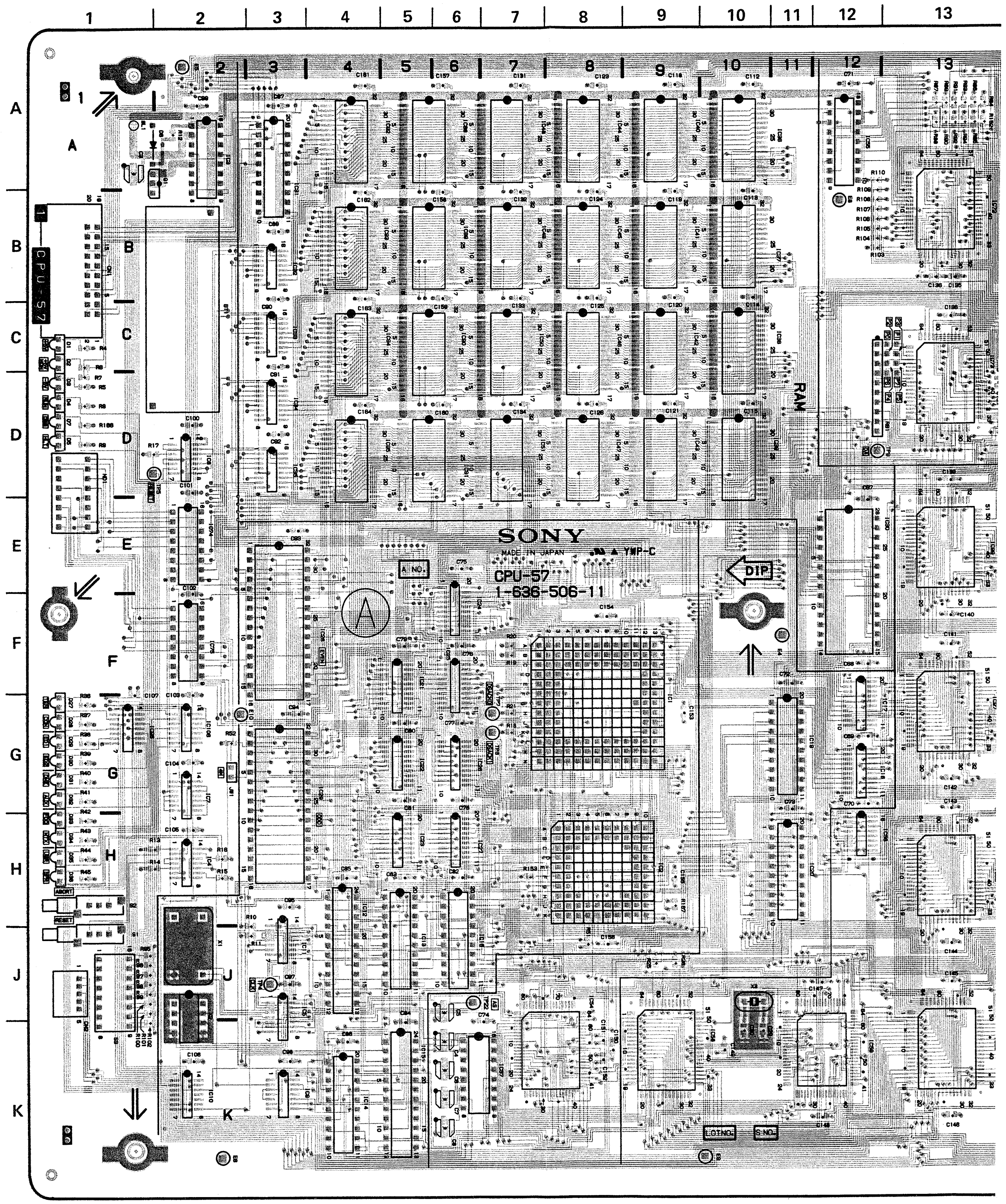
SECTION 10
PRINTED CIRCUIT BOARDS

DVS-8000

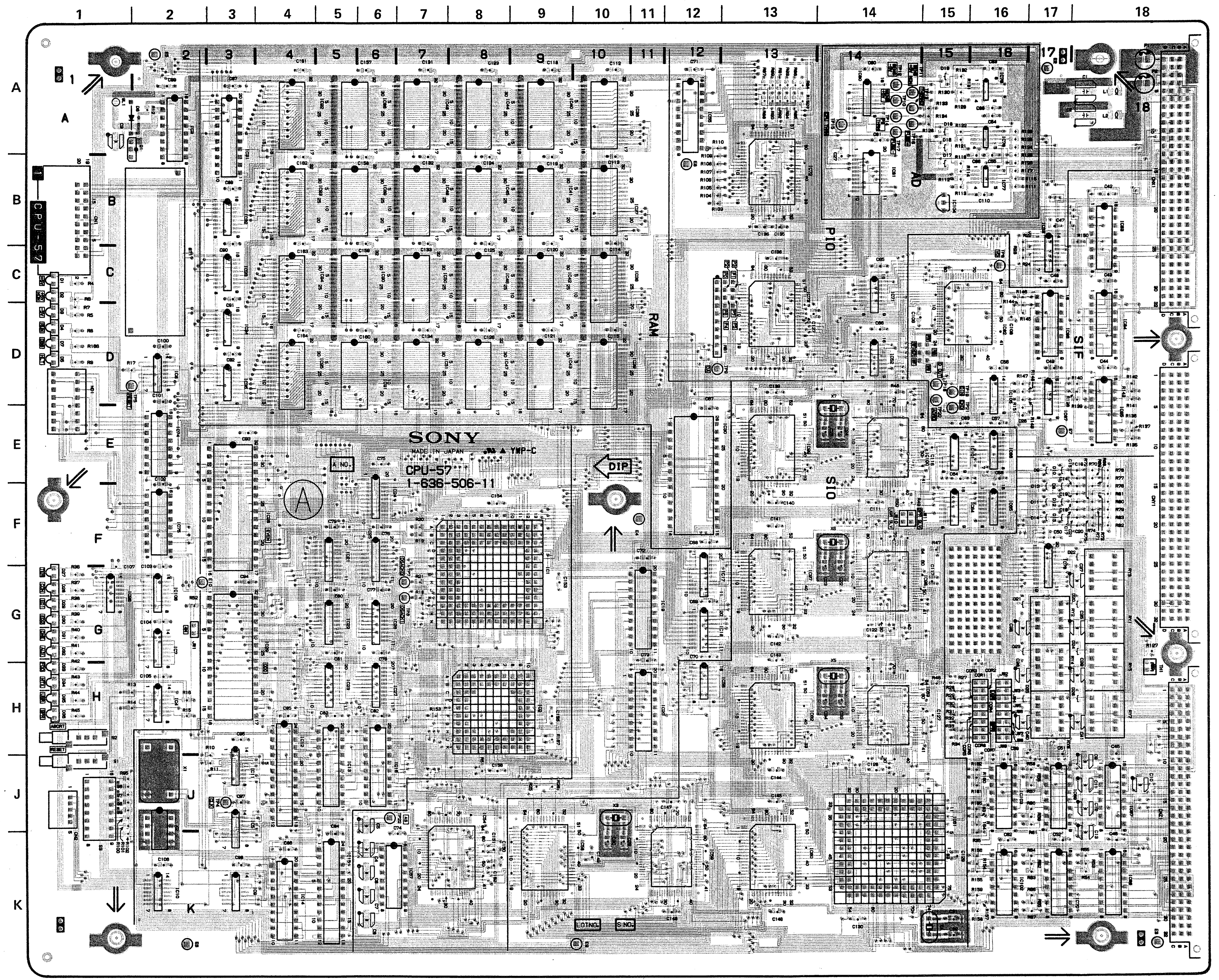
CPU-57 (1-636-506-11)

BT1	C-2
CNX1	B-18
CNY1	F-18
CNZ1	J-18
CN1	B-1
CN2	K-1
COR1	H-16
COR2	H-16
COR3	H-16
COR4	H-16
COR5	H-15
COR6	H-15
COR7	H-16
COR8	H-16
D1	C-1
D2	C-1
D3	D-1
D4	D-1
D5	D-1
D6	A-2
D7	D-1
D8	F-17
D9	E-17
D10	E-17
D11	F-17
D12	F-17
D13	F-17
D14	F-17
D15	F-17
D16	A-15
D17	B-15
D18	A-15
D19	A-15
D20	G-18
D21	G-16
D22	F-18
D23	G-16
D24	G-18
D25	H-16
D26	H-18
D27	G-1
D28	G-1
D29	G-1
D30	G-1
D31	G-1
D32	G-1
D33	H-1
D34	H-1
D35	H-1
D36	H-1
E2	A-17
E3	K-18
E4	F-11
E5	A-2
E6	K-2
E7	E-17
E8	B-12
E9	K-10
E10	G-3
F1	A-18
F2	A-18
IC1	G-9
IC2	H-9
IC3	A-2
IC4	H-2
IC5	J-3
IC7	G-2
IC8	D-2
IC9	K-3
IC10	K-2
IC11	J-3
IC12	H-4
IC13	J-5
IC14	K-4
IC15	K-5
IC16	J-6
IC17	G-13
IC18	G-12
IC19	G-11
IC20	H-11
IC21	F-5
IC22	G-5
IC23	H-5
IC24	F-6
IC25	F-6
IC26	G-6
IC27	H-6
IC28	F-4
IC29	G-4
IC30	E-13
IC31	A-3
IC32	B-3
IC33	C-3
IC34	D-3
IC35	D-3
IC36	A-11
IC37	B-11
IC38	C-11
IC39	D-11
IC40	A-9
IC41	B-9
IC42	C-9
IC43	D-9
IC44	A-8
IC45	B-8
IC46	C-8
IC47	D-8
IC48	A-7
IC49	B-7
IC50	C-7
IC51	D-7
IC52	D-14
IC53	B-17
IC54	J-8
IC55	A-12
IC56	H-13
IC57	K-7
IC58	K-10
IC59	K-12
IC60	K-13
IC61	J-15
IC62	H-13
IC63	H-15
IC64	F-16
IC65	F-16
IC66	E-16
IC67	J-18
IC68	K-18
IC69	J-18
IC70	K-18
IC71	C-14
IC72	B-13
IC73	C-13
IC74	E-2
IC75	F-2
IC76	G-17
IC77	B-16
IC78	A-16
IC79	A-16
IC80	A-14
IC81	B-14
IC82	D-16
IC83	B-18
IC84	D-18
IC85	E-18
IC86	D-16
IC87	E-17
IC88	A-6
IC89	B-6
IC90	C-6
IC91	D-6
IC92	A-5
IC93	B-5
IC94	C-5
IC95	D-5
IC96	G-1
IC97	G-13
IC98	G-15
IC99	E-13
IC100	E-15
IC101	E-16
IC102	K-16
IC103	J-16
IC104	B-15
IC105	D-16
IC106	G-2
JW2	H-2
JW3	H-16
JW4	H-16
JW5	H-16
JW6	H-16
JW7	H-16
JW8	H-16
JW9	H-16
L2	A-18
ND1	D-1
Q1	A-2
RB1	D-13
RY1	G-18
RY2	G-18
RY3	G-18
RY4	G-18
RY5	H-18
RY6	H-17
RY7	H-18
S1	J-1
S2	H-1
S3	K-1
TH1	H-18
TP4	J-3
TP5	D-2
TP6	G-7
TP7	G-7
TP8	C-16
TP9	D-13
TP10	A-14
TP11	A-14
TP12	A-14
TP13	A-15
TP14	A-14
TP15	A-14
TP16	A-14
TP17	A-14
TP18	D-15
TP19	D-15
TP20	E-15
TP21	E-15
X1	J-1
X2	J-2
X3	J-10
X4	K-15
X5	H-14
X6	F-14
X7	D-14

CPU-57; CPU BOARD S/N; 10001 through 10030



CPU-57; CPU BOARD S/N; 10001 through 10030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J
K
CPU-57
SONY
MADE IN JAPAN
CPU-57
1-636-506-11
YMP-C
A NO.
RAM
DIP
PIO
AD
SIO
SIF
ABORT
RESET
LOT NO.
S.NO.

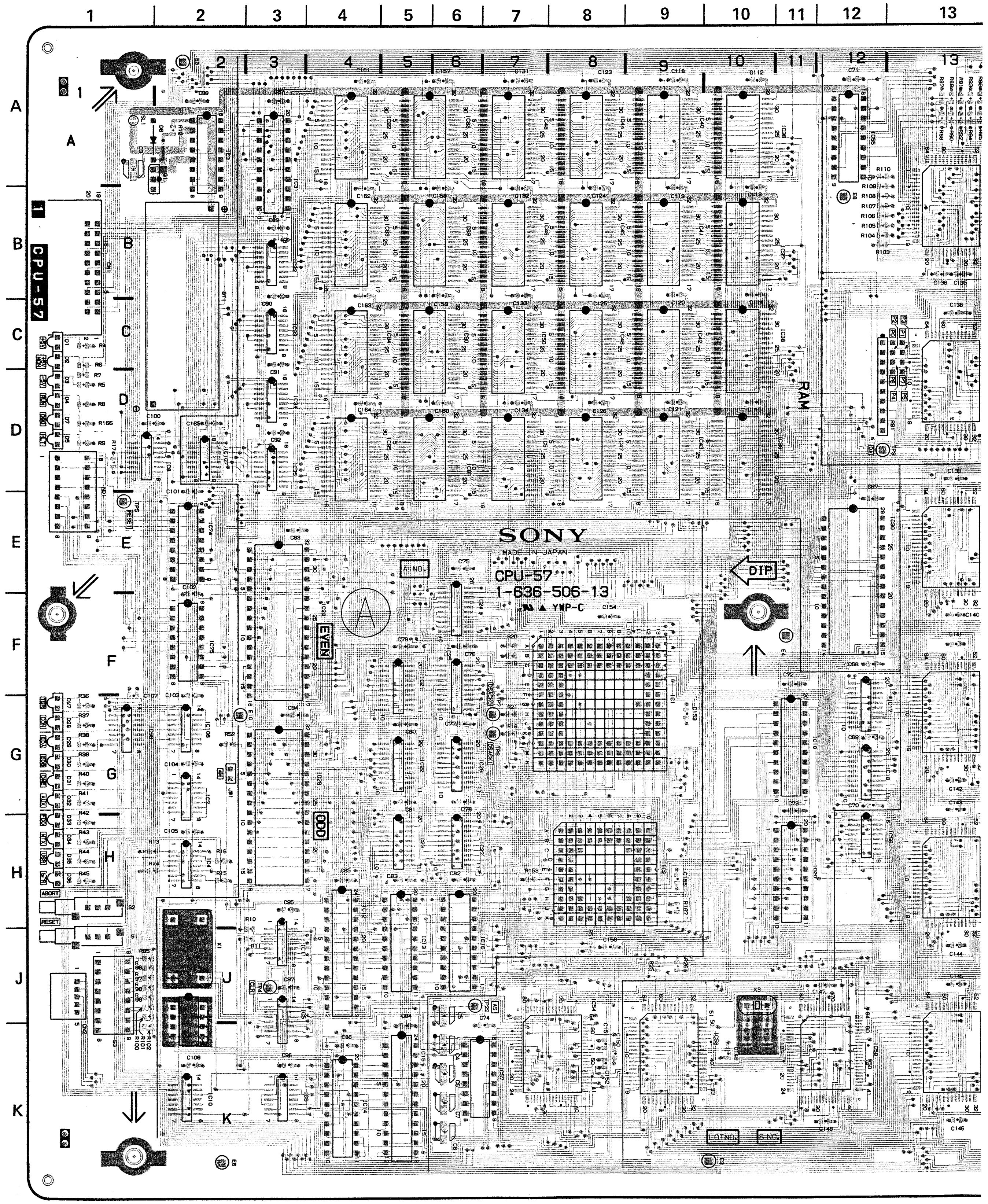
CPU-57 -A SIDE-
1-636-506-11
DVS-8000

DVS-8000

CPU-57 (1-636-506-12, 13)

BT1	C-2	F1	A-18	IC65	F-16	S1	J-1
		F2	A-18	IC66	E-16	S2	H-1
CNX1	B-18			IC67	J-18	S3	K-1
		IC1	G-9	IC68	K-18		
CNY1	F-18	IC2	H-9	IC69	J-18	TH1	H-18
		IC3	A-2	IC70	K-18		
CNZ1	J-18	IC4	H-2	IC71	C-14	TP4	J-3
		IC5	J-3	IC72	B-13	TP5	E-1
CN1	B-1	IC7	G-2	IC73	C-13	TP6	G-7
CN2	K-1	IC8	D-1	IC74	E-2	TP7	G-7
		IC9	K-3	IC75	F-2	TP8	C-16
COR1	H-16	IC10	K-2	IC76	G-17	TP9	D-13
COR2	H-16	IC11	J-3	IC77	B-16	TP10	A-14
COR3	H-16	IC12	H-4	IC78	A-16	TP11	A-14
COR4	H-16	IC13	J-5	IC79	A-16	TP12	A-14
COR5	H-15	IC14	K-4	IC80	A-14	TP13	A-15
COR6	H-15	IC15	K-5	IC81	B-14	TP14	A-14
COR7	H-16	IC16	J-6	IC82	D-16	TP15	A-14
COR8	H-16	IC17	G-13	IC83	B-18	TP16	A-14
		IC18	G-12	IC84	D-18	TP17	A-14
D1	C-1	IC19	G-11	IC85	E-18	TP18	D-15
D2	C-1	IC20	H-11	IC86	D-16	TP19	D-15
D3	D-1	IC21	F-5	IC87	E-17	TP20	E-15
D4	D-1	IC22	G-5	IC88	A-6	TP21	E-15
D5	D-1	IC23	H-5	IC89	B-6	TP22	J-7
D6	A-2	IC24	F-6	IC90	C-6		
D7	D-1	IC25	F-6	IC91	D-6	X1	J-1
D8	F-17	IC26	G-6	IC92	A-5	X2	J-2
D9	E-17	IC27	H-6	IC93	B-5	X3	J-10
D10	E-17	IC28	F-4	IC94	C-5	X4	K-15
D11	F-17	IC29	G-4	IC95	D-5	X5	H-14
D12	F-17	IC30	E-13	IC96	G-1	X6	F-14
D13	F-17	IC31	A-3	IC97	G-13	X7	D-14
D14	F-17	IC32	B-3	IC98	G-15		
D15	F-17	IC33	C-3	IC99	E-13		
D16	A-15	IC34	D-3	IC100	E-15		
D17	B-15	IC35	D-3	IC101	E-16		
D18	A-15	IC36	A-11	IC102	K-16		
D19	A-15	IC37	B-11	IC103	J-16		
D20	G-18	IC38	C-11	IC104	B-15		
D21	G-16	IC39	D-11	IC105	D-16		
D22	F-18	IC40	A-9	IC106	G-2		
D23	G-16	IC41	B-9	IC107	D-2		
D24	G-18	IC42	C-9				
D25	H-16	IC43	D-9	JW2	H-2		
D26	H-18	IC44	A-8	JW3	H-16		
D27	G-1	IC45	B-8	JW4	H-16		
D28	G-1	IC46	C-8	JW5	H-16		
D29	G-1	IC47	D-8	JW6	H-16		
D30	G-1	IC48	A-7	JW7	H-16		
D31	G-1	IC49	B-7	JW8	H-16		
D32	G-1	IC50	C-7	JW9	H-16		
D33	H-1	IC51	D-7				
D34	H-1	IC52	D-14	ND1	D-1		
D35	H-1	IC53	B-17				
D36	H-1	IC54	J-8	Q1	A-2		
		IC55	A-12				
E2	A-17	IC56	H-13	RB1	D-13		
E3	K-18	IC57	K-7				
E4	F-11	IC58	K-10	RY1	G-18		
E5	A-2	IC59	K-12	RY2	G-18		
E6	K-2	IC60	K-13	RY3	G-18		
E7	E-17	IC61	J-15	RY4	G-18		
E8	B-12	IC62	H-13	RY5	H-18		
E9	K-10	IC63	H-15	RY6	H-17		
E10	G-3	IC64	F-16	RY7	H-18		

CPU-57; CPU BOARD S/N: 10031 and higher



J-
H-1
K-1
H
J-3
E-1
G
G
C
D-13
A-14
A
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A-14
A-14
A
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D
D-15
E-15
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J-1
J-2
J-
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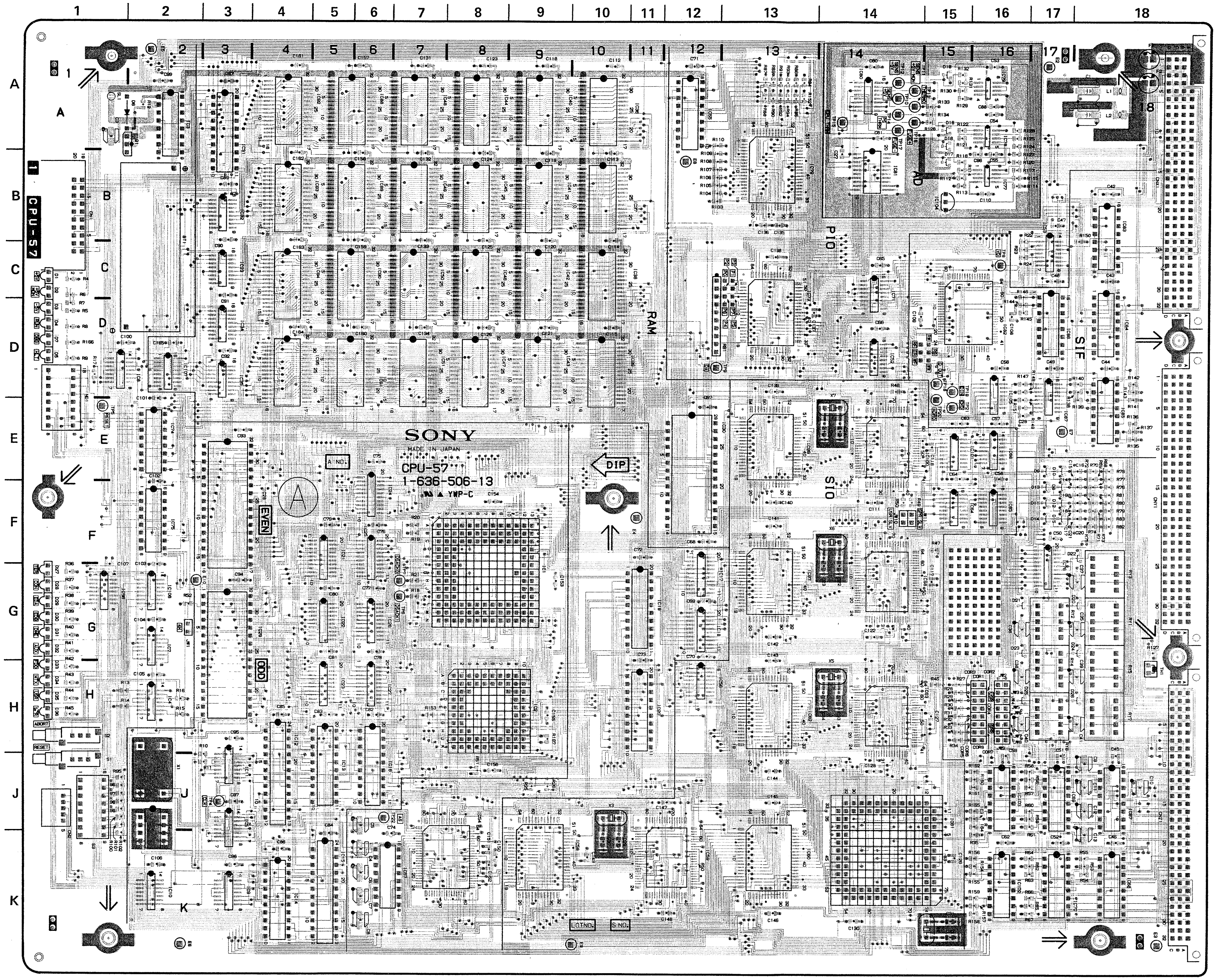
H
F-14
D-14

CPU-57; CPU BOARD S/N; 10031 and higher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J
K
CPU-57
SONY
MADE IN JAPAN
CPU-57
1-636-506-13
YMP-C
RAM
PIO
SIO
SIF
AD
DIP
EVEN
ODD
ABORT
RESET
S-NO.
LOTNO.

CPU-57 -A SIDE-
1-636-506-12, 13
DVS-8000

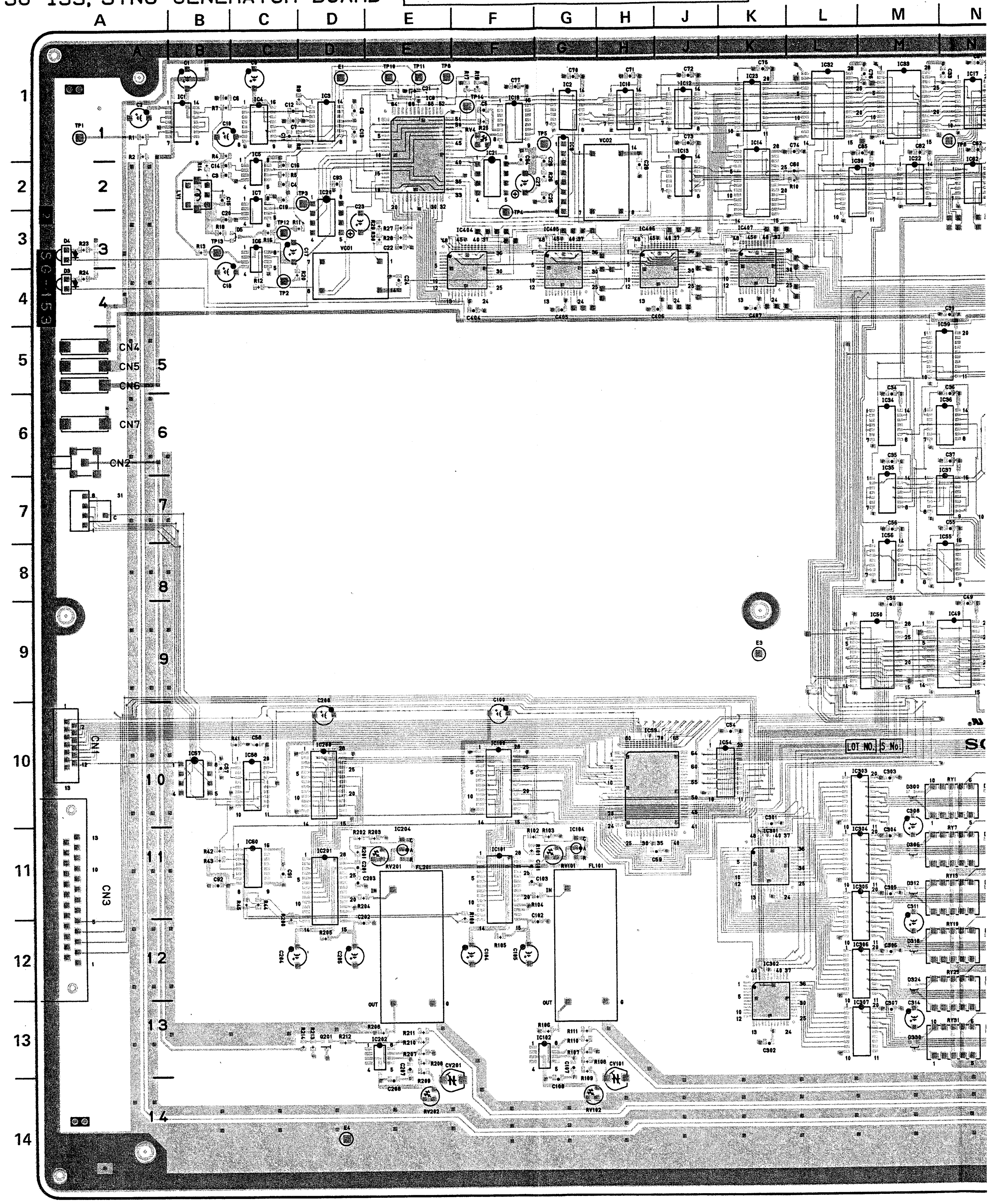
DVS-8000

SG-153 (1-636-507-11)

CNX1	W-2
CNY1	W-8
CNZ1	W-12
CN1	A-10
CN2	A-6
CN3	A-11
CN4	A-5
CN5	A-5
CN6	A-5
CN7	A-6
CV101	H-13
CV201	E-13
D1	W-1
D2	W-1
D3	A-4
D4	A-3
D5	C-3
D6	W-14
D300	M-10
D301	N-10
D302	P-10
D303	R-10
D304	S-10
D305	U-10
D306	M-11
D307	N-11
D308	P-11
D309	R-11
D310	S-11
D311	U-11
D312	M-11
D313	N-11
D314	P-11
D315	R-11
D316	S-11
D317	U-11
D318	M-12
D319	N-12
D320	P-12
D321	R-12
D322	S-12
D323	U-12
D324	M-12
D325	N-12
D326	P-12
D327	R-12
D328	S-12
D329	U-12
D330	M-13
D331	N-13
D332	P-13
D333	R-13
D334	S-13
D335	U-13
E1	D-1
E2	P-1
E3	K-9
E4	D-14
E5	P-15
FL101	G-11
FL201	E-11
F1	V-1
F2	W-1
IC1	B-1
IC2	G-1
IC3	D-1
IC4	C-1
IC5	C-1
IC6	C-3
IC7	C-2
IC8	E-1
IC9	G-1
IC10	H-1
IC12	J-1
IC13	J-1
IC14	K-1
IC17	N-1
IC18	F-1
IC20	D-2
IC21	F-1
IC22	M-2
IC23	K-1
IC25	R-1
IC26	U-5
IC27	T-2
IC28	P-1
IC29	V-2
IC30	L-2
IC31	R-1
IC32	L-1
IC33	M-1
IC34	M-6
IC35	M-6
IC36	N-6
IC37	N-7
IC38	N-6
IC39	N-5
IC40	Q-8
IC41	P-8
IC42	R-8
IC43	S-8
IC44	R-6
IC45	S-6
IC46	S-6
IC47	U-7
IC48	U-8
IC49	N-9
IC50	M-9
IC51	V-5
IC52	V-6
IC53	V-7
IC54	K-10
IC55	N-7
IC56	M-7
IC57	B-10
IC58	C-10
IC59	H-10
IC60	C-11
IC61	V-9
IC62	N-2
IC63	P-2
IC64	Q-2
IC100	F-10
IC101	F-11
IC102	G-13
IC104	G-11
IC200	D-10
IC201	D-11
IC202	E-13
IC204	E-11
IC301	K-11
IC302	K-12
IC303	M-10
IC304	M-11
IC305	M-11
IC306	M-12
IC307	M-13
IC401	V-4
IC402	U-4
IC403	R-3
IC404	F-3
IC405	G-3
IC406	H-3
IC407	K-3
IC408	W-10
IC409	T-4
LV1	B-2
Q1	W-14
Q2	W-14
Q201	D-13
RV4	F-1
RV101	G-11
RV102	G-14
RV201	E-11
RV202	E14
RY1	N-10
RY2	P-10
RY3	Q-10
RY4	S-10
RY5	T-10
RY6	V-10
RY7	N-11
RY8	P-11
RY9	Q-11
RY10	S-11
RY11	T-11
RY12	V-11
RY13	N-11
RY14	P-11
RY15	Q-11
RY16	S-11
RY17	T-11
RY18	V-11
RY19	N-12
RY20	P-12
RY21	Q-12
RY22	S-12
RY23	T-12
RY24	V-12
RY25	N-12
RY26	P-12
RY27	Q-12
RY28	S-12
RY29	T-12
RY30	V-12
RY31	N-13
RY32	P-13
RY33	Q-13
RY34	S-13
RY35	T-13
RY36	V-13
S1	A-7
TH1	W-10
TP1	A-1
TP2	C-4
TP3	D-2
TP4	F-3
TP5	G-1
TP6	N-1
TP8	E-1
TP10	E-1
TP11	E-1
TP12	C-3
TP13	B-3
TP14	F-1
VCO1	D-3
VCO2	H-1

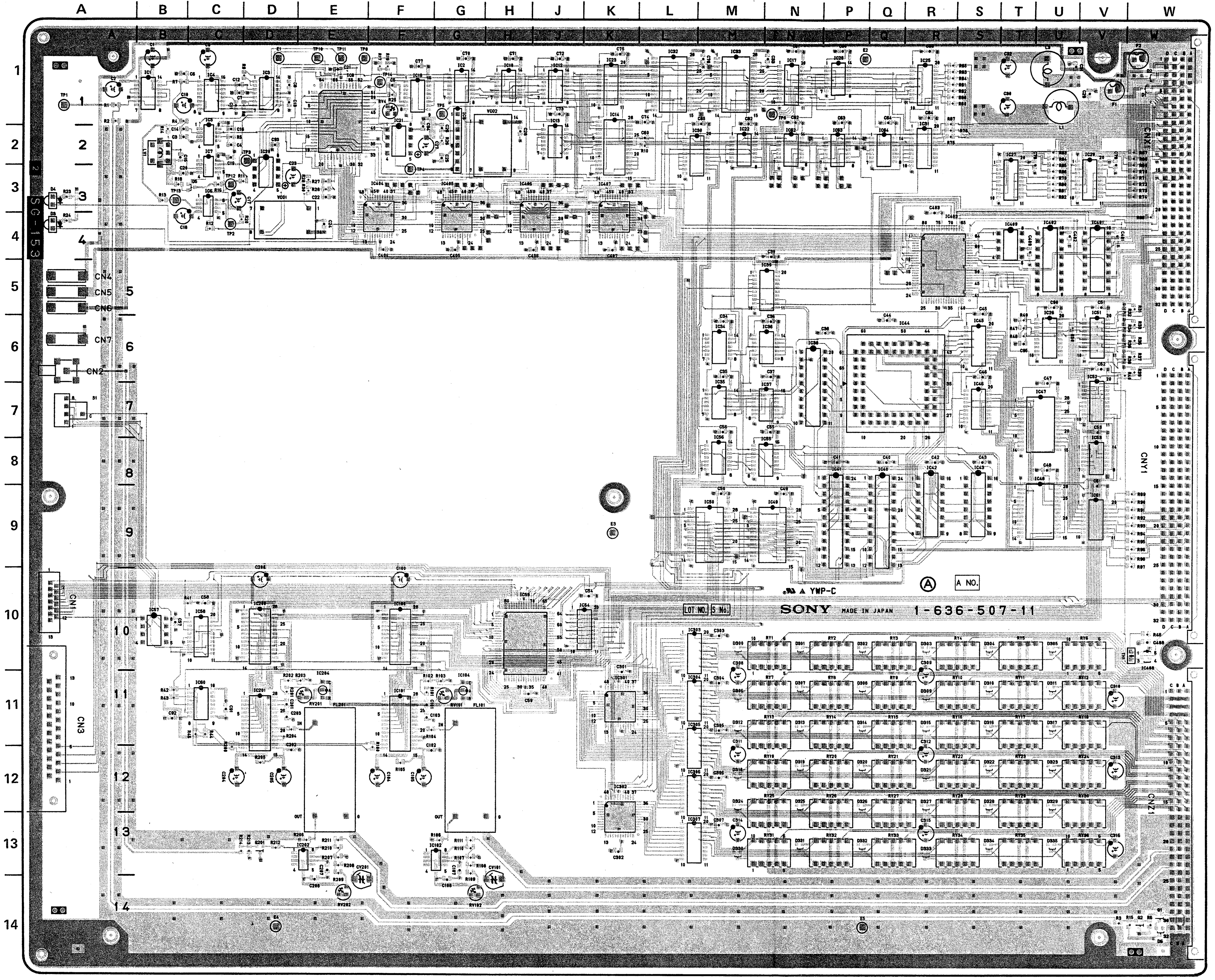
SG-153; SYNC GENERATOR BOARD

S/N; 10001 through 10030



SG-153; SYNC GENERATOR BOARD

S/N; 10001 through 10030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CN1
CN2
CN3
CN4
CN5
CN6
CN7
CNX1
CNY1
CNZ1
SONY MADE IN JAPAN 1-636-507-11
LOT NO.
S No.
A NO.

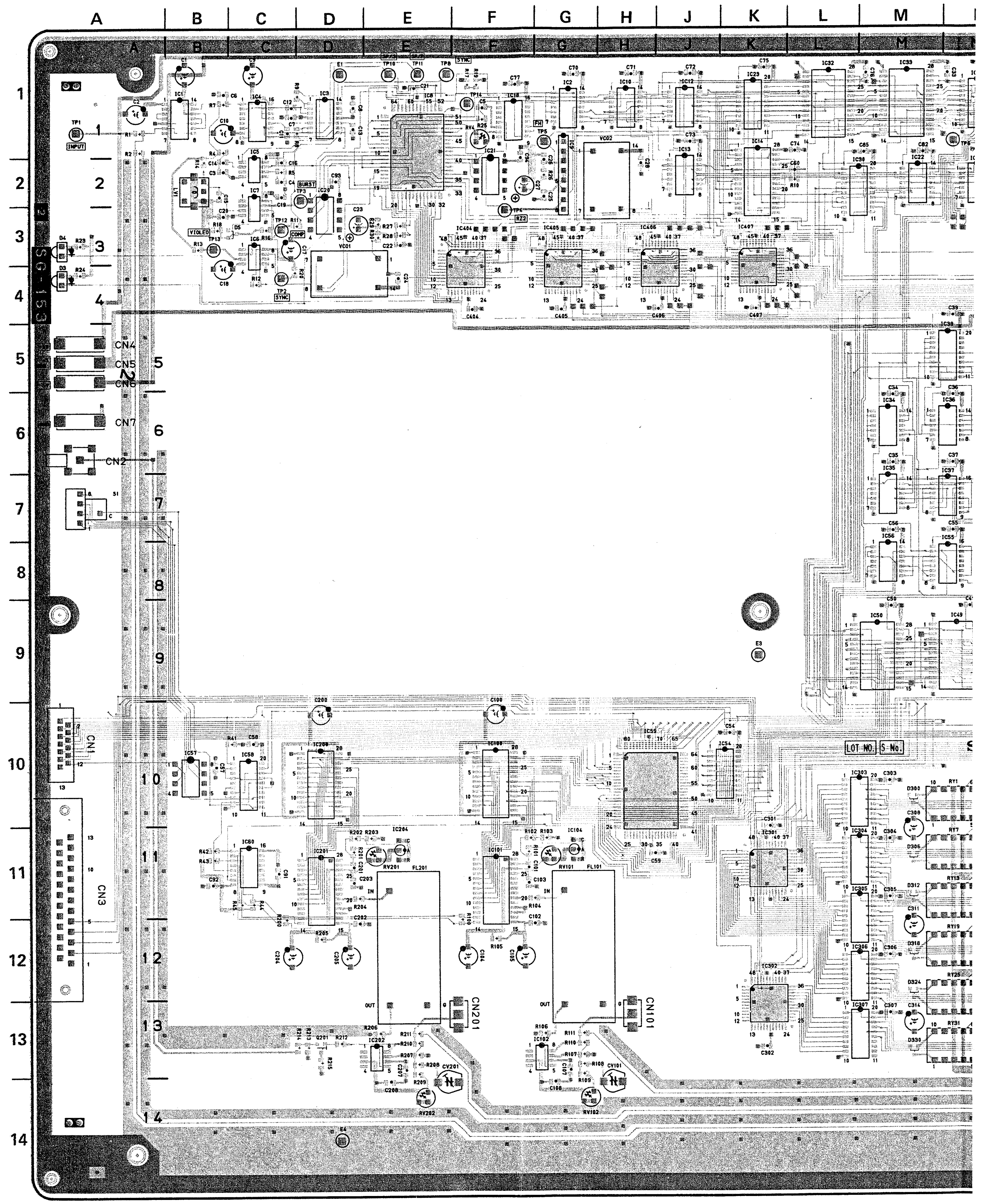
SG-153 -A SIDE-
1-636-507-11
DVS-8000

DVS-8000

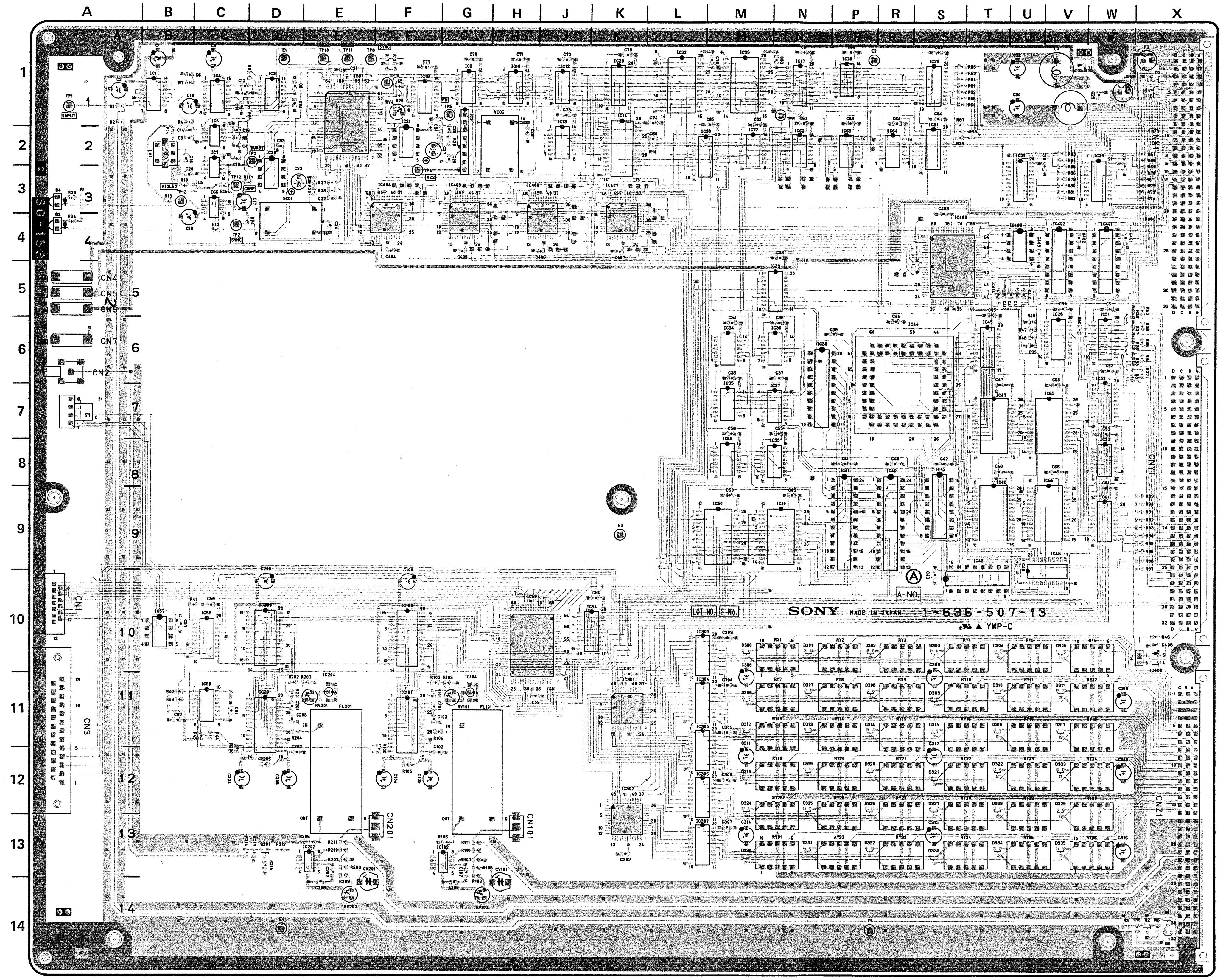
SG-153 (1-636-507-13)

CNX1	X-2
CNY1	X-8
CNZ1	X-12
CN1	A-10
CN2	A-6
CN3	A-11
CN4	A-5
CN5	A-5
CN6	A-5
CN7	A-6
CN101	H-13
CN201	F-13
CV101	H-13
CV201	E-13
D1	X-1
D2	X-1
D3	A-4
D4	A-3
D5	C-3
D6	X-14
D300	M-10
D301	N-10
D302	P-10
D303	S-10
D304	T-10
D305	V-10
D306	M-11
D307	N-11
D308	P-11
D309	S-11
D310	T-11
D311	V-11
D312	M-11
D313	N-11
D314	P-11
D315	S-11
D316	T-11
D317	V-11
D318	M-12
D319	N-12
D320	P-12
D321	S-12
D322	T-12
D323	V-12
D324	M-12
D325	N-12
D326	P-12
D327	S-12
D328	T-12
D329	V-12
D330	M-13
D331	N-13
D332	P-13
D333	S-13
D334	T-13
D335	V-13
E1	D-1
E2	P-1
E3	K-9
E4	D-14
E5	P-14
FL101	G-11
FL201	E-11
F1	W-1
F2	X-1
IC1	B-1
IC2	G-1
IC3	D-1
IC4	C-1
IC5	C-1
IC6	C-3
IC7	C-2
IC8	E-1
IC9	G-1
IC10	H-1
IC12	J-1
IC13	J-1
IC14	K-1
IC17	N-1
IC18	F-1
IC20	D-2
IC21	F-1
IC22	M-2
IC23	K-1
IC25	S-1
IC26	V-5
IC27	U-2
IC28	P-1
IC29	W-2
IC30	L-2
IC31	S-1
IC32	L-1
IC33	M-1
IC34	M-6
IC35	M-6
IC36	N-6
IC37	N-7
IC38	N-6
IC39	N-5
IC40	R-8
IC41	P-8
IC42	R-8
IC43	T-9
IC44	S-6
IC45	T-6
IC46	V-6
IC47	T-7
IC48	T-8
IC49	N-9
IC50	M-9
IC51	W-5
IC52	W-6
IC53	W-7
IC54	K-10
IC55	N-7
IC56	M-7
IC57	B-10
IC58	C-10
IC59	H-10
IC60	C-11
IC61	W-9
IC62	N-2
IC63	P-2
IC64	R-2
IC65	V-7
IC66	V-8
IC100	F-10
IC101	F-11
IC102	G-13
IC104	G-11
IC200	D-10
IC201	D-11
IC202	E-13
IC204	E-11
IC301	K-11
IC302	K-12
IC303	M-10
IC304	M-11
IC305	M-11
IC306	M-12
IC307	M-13
IC401	W-4
IC402	V-4
IC403	S-4
IC404	F-3
IC405	G-3
IC406	H-3
IC407	K-3
IC408	X-10
IC409	U-4
LV1	B-2
Q1	X-14
Q2	X-14
Q201	D-13
RV4	F-1
RV101	G-11
RV102	G-14
RV201	E-11
RV202	E14
RY1	N-10
RY2	P-10
RY3	R-10
RY4	T-10
RY5	U-10
RY6	W-10
RY7	N-11
RY8	P-11
RY9	R-11
RY10	T-11
RY11	U-11
RY12	W-11
RY13	N-11
RY14	P-11
RY15	R-11
RY16	T-11
RY17	U-11
RY18	W-11
RY19	N-12
RY20	P-12
RY21	R-12
RY22	T-12
RY23	U-12
RY24	W-12
RY25	N-12
RY26	P-12
RY27	R-12
RY28	Y-12
RY29	U-12
RY30	W-12
RY31	N-13
RY32	P-13
RY33	S-13
RY34	T-13
RY35	U-13
RY36	W-13
S1	A-7
TH1	X-10
TP1	A-1
TP2	C-4
TP3	D-2
TP4	F-3
TP5	G-1
TP6	N-1
TP8	E-1
TP10	E-1
TP11	E-1
TP12	C-3
TP13	B-3
TP14	F-1
VCO1	D-3
VCO2	H-1

SG-153: SYNC GENERATOR BOARD S/N: 10031 and higher



SG-153; SYNC GENERATOR BOARD S/N; 10031 and higher


A
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CN1
CN2
CN3
CN4
CN5
CN6
CN7
CNX1
CNY1
CNZ1
CN101
CN201
FL101
FL201
INPUT
VIOLED
BURST
SYNC
SONY MADE IN JAPAN 1-636-507-13
YMP-C
LOT NO. S No.
A NO.
SG-153

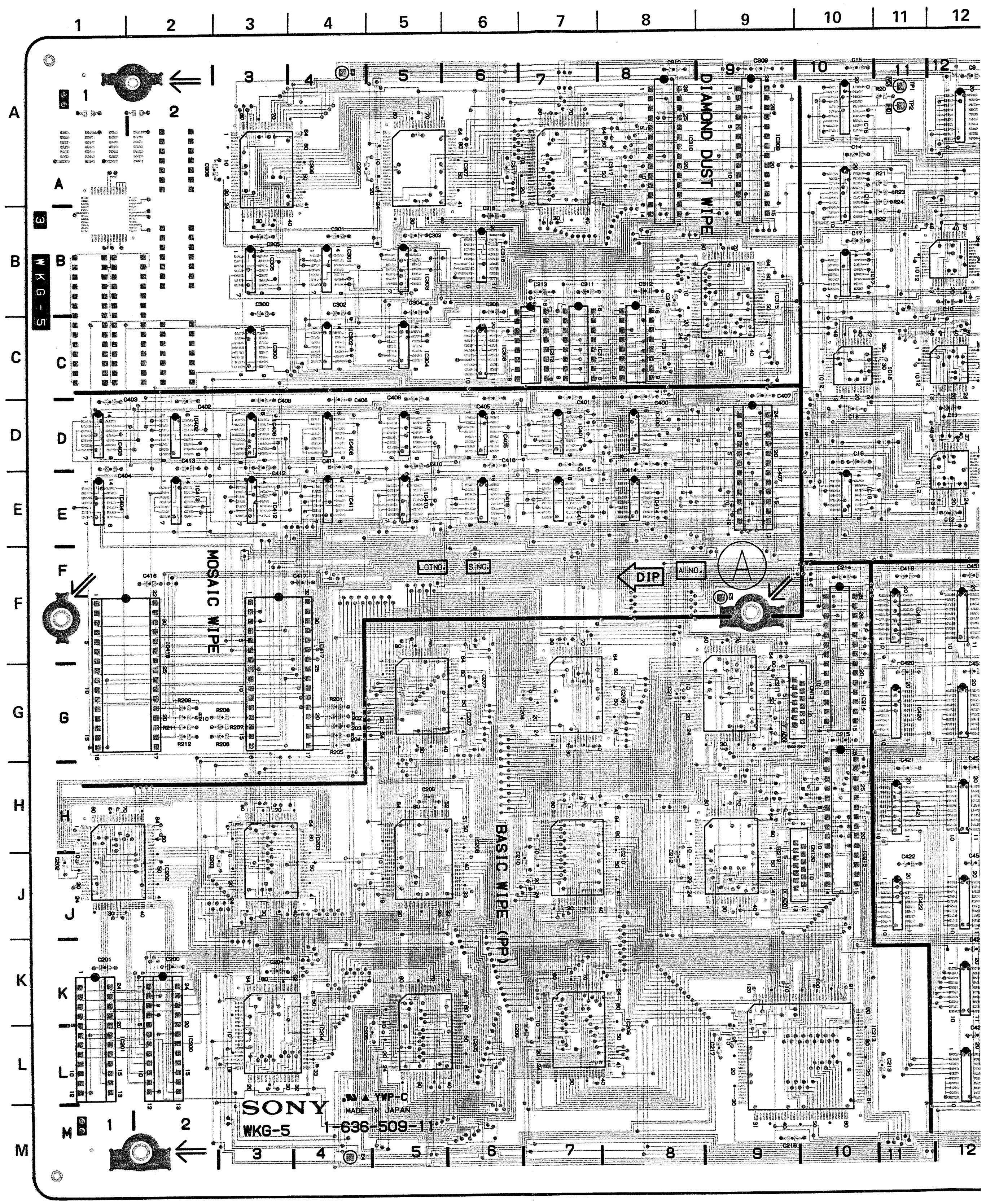
SG-153 -A SIDE-
1-636-507-13
DVS-8000

DVS-8000

WKG-5 (1-636-509-11)

CNX1	B-16
CNY1	F-16
CNZ1	K-16
CN130	J-10
CN131	G-10
CN401	F-16
CN402	G-16
CN403	H-16
D1	A-16
E1	A-14
E2	M-13
E3	A-4
E4	M-4
E5	F-9
F1	A-16
IC1	H-16
IC2	C-16
IC3	D-16
IC4	A-16
IC5	B-16
IC6	B-14
IC7	C-14
IC8	A-14
IC9	A-12
IC10	B-12
IC11	C-12
IC12	E-12
IC14	A-10
IC15	A-10
IC16	E-10
IC17	B-10
IC18	C-11
IC200	L-2
IC201	L-1
IC202	J-2
IC203	H-4
IC204	L-4
IC205	L-6
IC206	H-6
IC207	G-6
IC208	G-8
IC209	L-8
IC210	J-8
IC211	G-9
IC212	J-9
IC213	L-10
IC214	G-10
IC215	J-10
IC300	C-3
IC301	B-4
IC302	C-4
IC303	B-5
IC304	C-5
IC305	B-3
IC306	A-4
IC307	A-6
IC308	C-6
IC309	A-9
IC310	A-8
IC311	C-8
IC312	C-8
IC313	C-7
IC315	B-9
IC316	B-6
IC400	D-8
IC401	D-7
IC402	D-2
IC403	D-1
IC404	E-1
IC405	D-6
IC406	D-5
IC407	E-9
IC408	D-4
IC409	D-3
IC410	E-5
IC411	E-4
IC412	E-3
IC413	E-2
IC414	E-8
IC415	E-7
IC416	E-6
IC417	F-4
IC418	F-2
IC419	F-11
IC420	G-11
IC421	H-11
IC422	J-11
IC423	L-12
IC428	K-12
IC429	F-13
IC430	G-13
IC431	H-13
IC432	J-13
IC433	K-13
IC434	L-13
IC435	F-14
IC436	H-16
IC437	L-14
IC438	F-16
IC439	G-16
IC440	K-16
IC441	L-16
IC442	H-16
IC443	J-16
IC444	G-15
IC445	F-15
IC446	J-15
IC447	H-15
IC448	L-15
IC449	K-15
IC450	M-15
IC451	F-12
IC452	G-12
IC453	H-12
IC454	J-12
TH10	H-16
TP1	A-11
TP2	A-11

WKG-5; ENHANCED WIPE BOARD S/N; 10001 through 10030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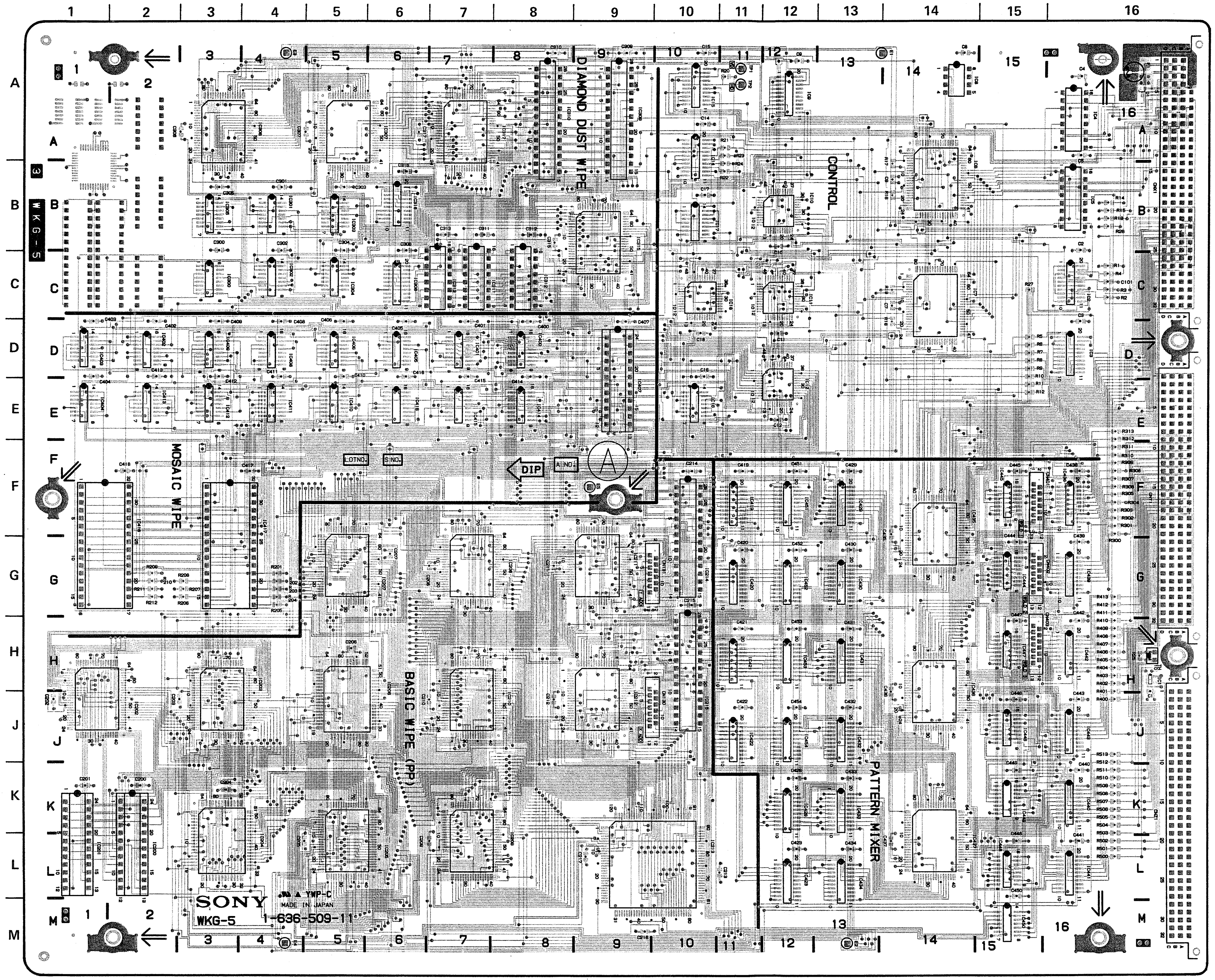
J
K
L
M
DIAMOND DUST WIPE
MOSAIC WIPE
BASIC WIPE (PP)
LOTNO.
S/NO.
DIP
A
WKG-5
SONY
WKG-5
1-636-509-11
MADE IN JAPAN

310	A-8
311	C-8
312	C-8
31	C-7
31	B-9
31	B-6
400	D-8
401	D-7
40	D-2
40	D-1
40	E-1
405	D-6
406	D-5
407	E-9
40	D-4
40	D-3
10	E-5
11	E-4
12	E-3
1	E-2
1	E-8
15	E-7
16	E-6
17	F-4
18	F-2
1	F-11
20	G-11
21	H-11
22	J-11
2	L-12
2	K-12
29	F-13
30	G-13
31	H-13
3	J-13
3	K-13
34	L-13
35	F-14
3	H-16
37	L-14
3	F-16
39	G-16
40	K-16
41	L-16
4	H-16
4	J-16
44	G-15
45	F-15
4	J-15
47	H-15
4	L-15
49	K-15
50	M-15
51	F-12
5	G-12
5	H-12
54	J-12
10	H-16
1	A-11
2	A-11

WKG-5; ENHANCED WIPE BOARD S/N; 10001 through 10030


DIAMOND DUST WIPE
CONTROL
MOSAIC WIPE
BASIC WIPE (PP)
PATTERN MIXER
DIP
SONY
WKG-5
1-636-509-11
MADE IN JAPAN
WKG-5

WKG-5 -A SIDE-
1-636-509-11
DVS-8000

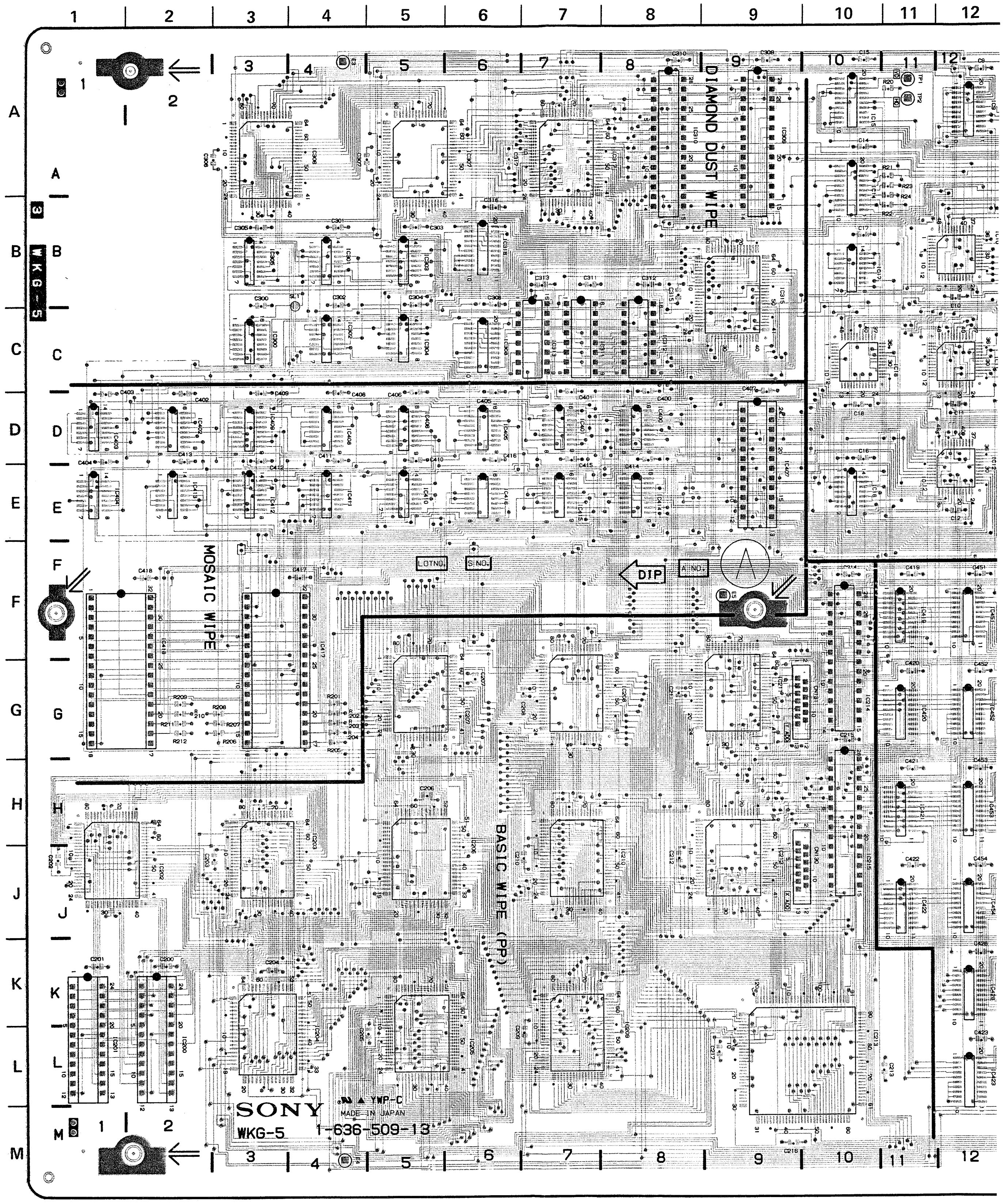
DVS-8000

WKG-5 (1-636-509-12, 13)

CNX1	B-16
CNY1	F-16
CNZ1	K-16
CN130	J-10
CN131	G-10
CN401	F-16
CN402	G-16
CN403	H-16
D1	A-16
E1	A-14
E2	M-13
E3	A-4
E4	M-4
E5	F-9
F1	A-16
IC1	H-16
IC2	C-16
IC3	D-16
IC4	A-16
IC5	B-16
IC6	B-14
IC7	C-14
IC8	A-14
IC9	A-12
IC10	B-12
IC11	C-12
IC12	E-12
IC14	A-10
IC15	A-10
IC16	E-10
IC17	B-10
IC18	C-11
IC19	A-13
IC200	L-2
IC201	L-1
IC202	J-2
IC203	H-4
IC204	L-4
IC205	L-6
IC206	H-6
IC207	G-6
IC208	G-8
IC209	L-8
IC210	J-8
IC211	G-9
IC212	J-9
IC213	L-10
IC214	G-10
IC215	J-10
IC300	C-3
IC301	B-4
IC302	C-4
IC303	B-5
IC304	C-5
IC305	B-3
IC306	A-4
IC307	A-6
IC308	C-6
IC309	A-9
IC310	A-8
IC311	C-8
IC312	C-8
IC313	C-7
IC315	B-9
IC316	B-6
IC317	A-8
IC400	D-8
IC401	D-7
IC402	D-2
IC403	D-1
IC404	E-1
IC405	D-6
IC406	D-5
IC407	E-9
IC408	D-4
IC409	D-3
IC410	E-5
IC411	E-4
IC412	E-3
IC413	E-2
IC414	E-8
IC415	E-7
IC416	E-6
IC417	F-4
IC418	F-2
IC419	F-11
IC420	G-11
IC421	H-11
IC422	J-11
IC423	L-12
IC428	K-12
IC429	F-13
IC430	G-13
IC431	H-13
IC432	J-13
IC433	K-13
IC434	L-13
IC435	F-14
IC436	H-14
IC437	L-14
IC438	F-16
IC439	G-16
IC440	K-16
IC441	L-16
IC442	H-16
IC443	J-16
IC444	G-15
IC445	F-15
IC446	J-15
IC447	H-15
IC448	L-15
IC449	K-15
IC450	M-15
IC451	F-12
IC452	G-12
IC453	H-12
IC454	J-12
TH10	H-16
TP1	A-11
TP2	A-11

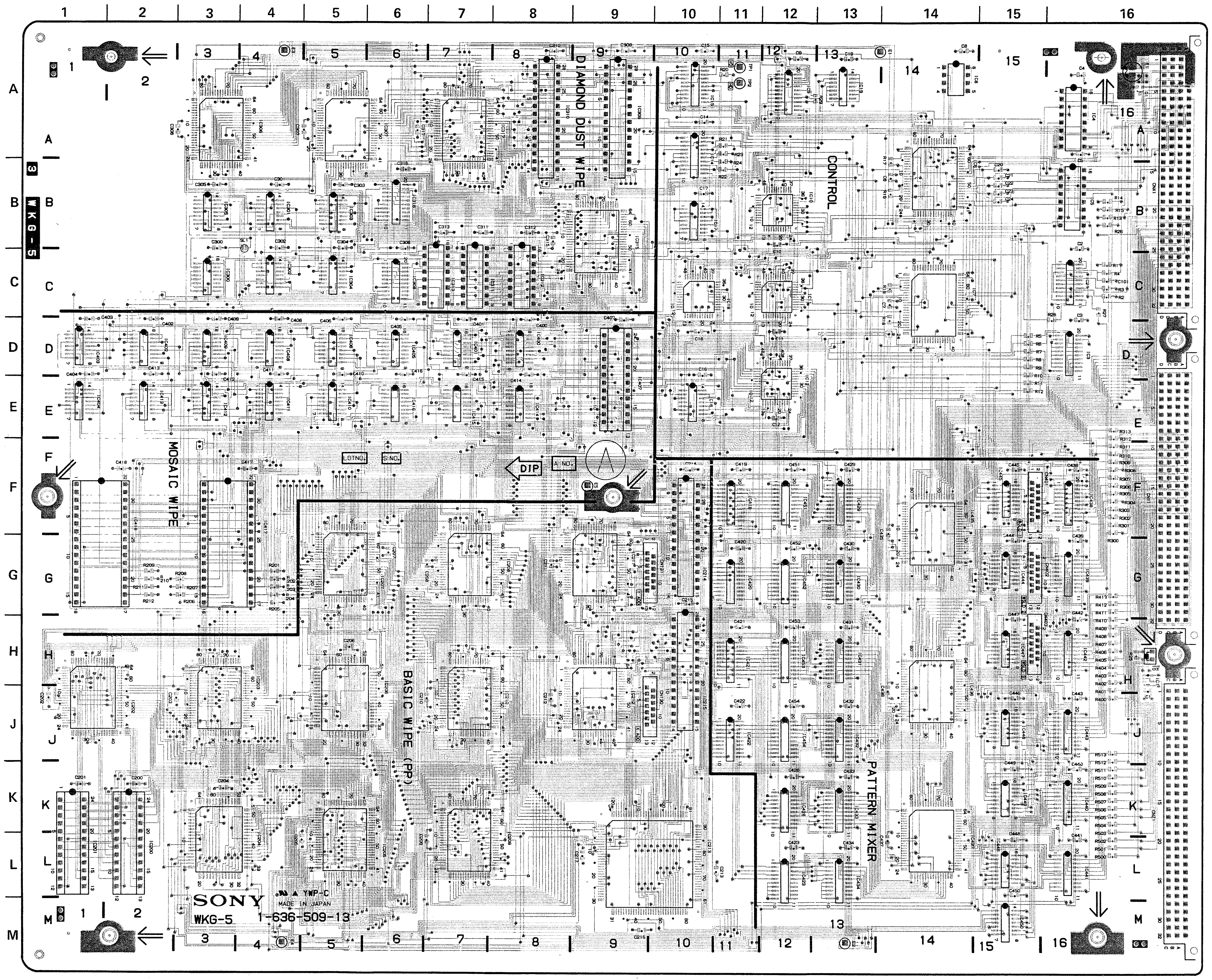
WKG-5; ENHANCED WIPE BOARD

S/N; 10031 and higher



WKG-5: ENHANCED WIPE BOARD

S/N: 10031 and higher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L
M
WKG-5
DIAMOND DUST WIPE
CONTROL
MOSAIC WIPE
BASIC WIPE (PP)
PATTERN MIXER
DIP
SONY
MADE IN JAPAN
WKG-5 1-636-509-13

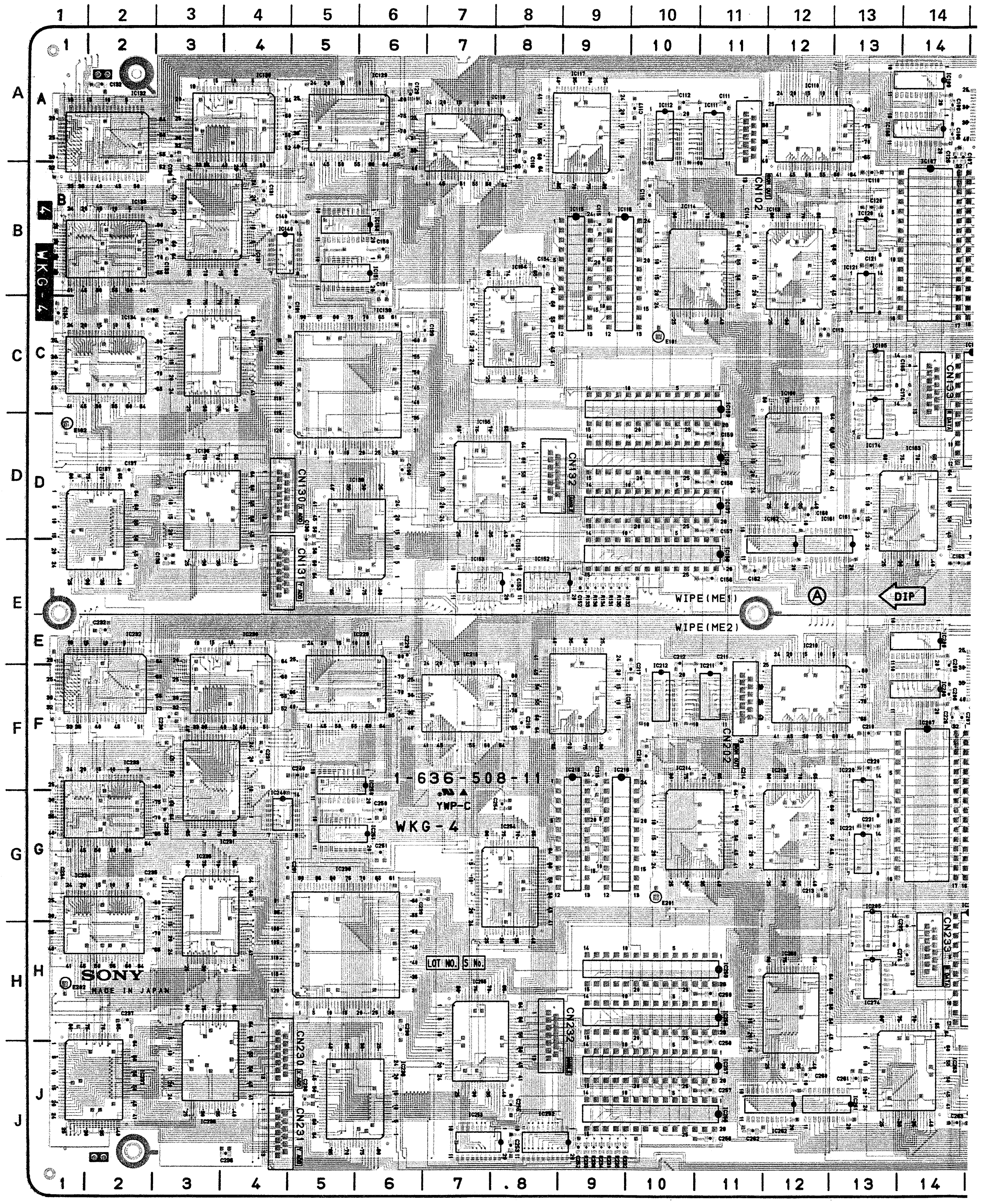
WKG-5 -A SIDE-
1-636-509-12, 13
DVS-8000

DVS-8000

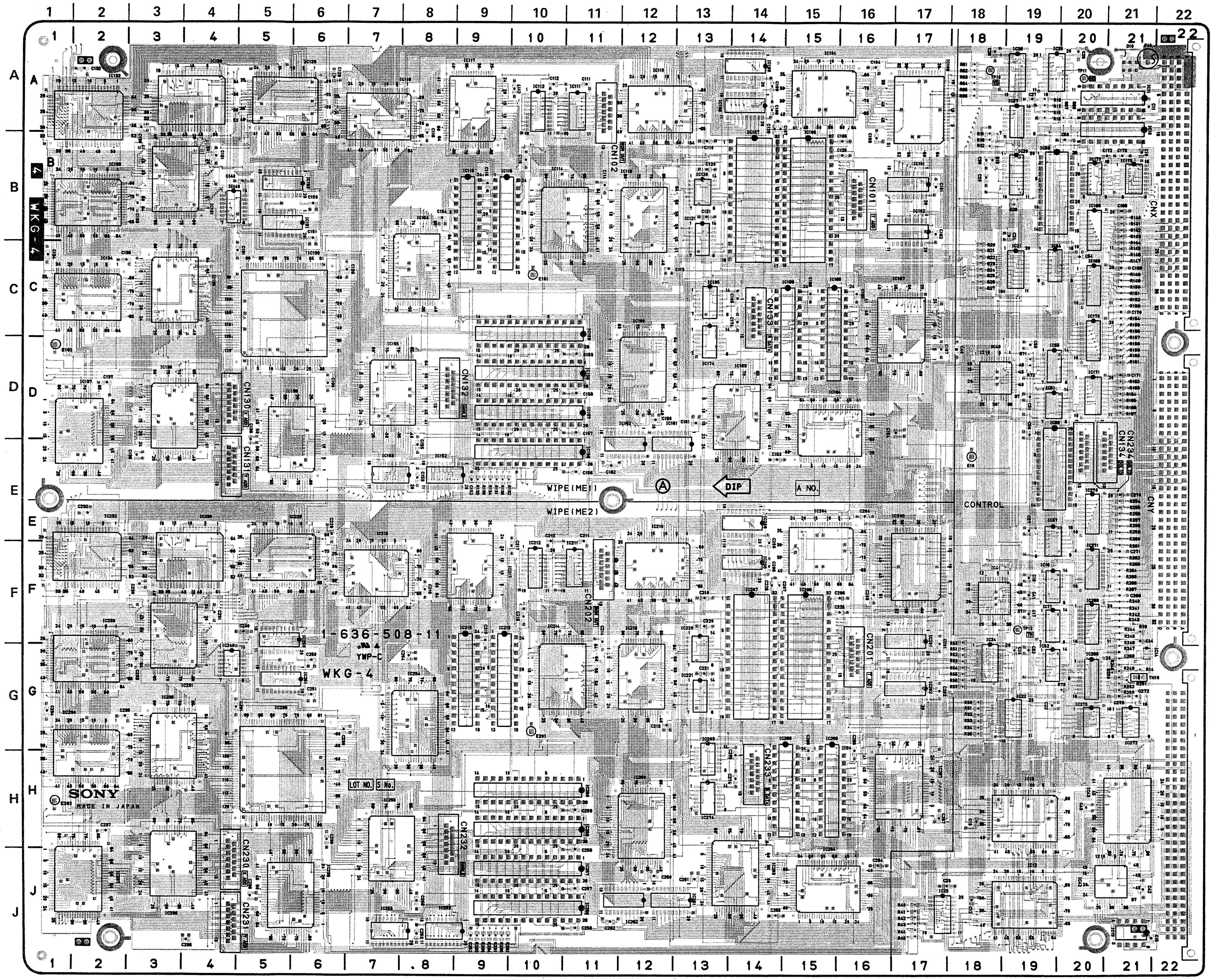
WKG-4 (1-636-508-11)

CNX1	B-22
CNY1	E-22
CNZ1	H-22
CN101	B-16
CN102	B-12
CN130	D-5
CN131	E-5
CN132	D-9
CN133	C-14
CN134	E-21
CN201	G-16
CN202	F-11
CN230	I-5
CN231	I-5
CN232	H-9
CN233	H-14
CN234	E-21
D-10	A-21
E-10	E-18
E-101	C-10
E-102	D-1
E-201	G-10
E-202	H-1
F-10	A-21
IC10	A-21
IC11	A-21
IC12	J-19
IC13	H-19
IC14	G-22
IC15	J-21
IC16	F-19
IC17	F-19
IC20	A-19
IC21	C-19
IC22	G-19
IC23	J-17
IC24	G-18
IC25	A-19
IC26	A-19
IC27	A-19
IC40	D-18
IC41	F-18
IC42	J-20
IC43	H-20
IC51	D-19
IC52	G-19
IC53	B-19
IC54	C-19
IC55	D-19
IC56	D-19
IC57	E-19
IC101	B-17
IC102	B-17
IC103	A-17
IC104	A-15
IC105	C-13
IC106	B-15
IC107	B-14
IC108	A-13
IC109	A-14
IC110	A-12
IC111	A-11
IC112	A-10
IC113	B-12
IC114	B-10
IC115	B-9
IC116	B-9
IC117	A-9
IC118	A-7
IC120	B-13
IC121	B-13
IC129	A-5
IC130	A-4
IC131	B-3
IC132	A-2
IC133	B-2
IC134	C-2
IC135	C-4
IC136	D-3
IC137	D-2
IC138	D-5
IC139	C-6
IC140	B-4
IC150	B-5
IC151	B-5
IC152	E-8
IC153	E-7
IC154	B-8
IC155	D-7
IC156	E-11
IC157	D-11
IC158	D-12
IC159	C-11
IC160	D-12
IC161	D-12
IC162	D-12
IC163	D-14
IC164	D-15
IC165	C-15
IC166	C-15
IC167	C-17
IC168	B-20
IC169	C-20
IC170	C-20
IC171	D-20
IC172	B-20
IC173	B-21
IC174	C-13
IC201	F-17
IC202	G-17
IC203	F-17
IC204	F-15
IC205	H-13
IC206	F-15
IC207	F-14
IC208	F-14
IC209	E-14
IC210	F-12
IC211	F-11
IC212	F-10
IC213	G-12
IC214	G-10
IC215	F-9
IC216	F-9
IC217	F-9
IC218	F-7
IC220	F-13
IC221	G-13
IC229	E-5
IC230	E-4
IC231	G-3
IC232	E-2
IC233	F-2
IC234	G-2
IC235	G-3
IC236	J-3
IC237	J-2
IC238	J-6
IC239	H-5
IC250	F-5
IC251	G-5
IC252	J-8
IC253	J-7
IC254	G-8
IC255	H-7
IC256	J-11
IC257	J-11
IC258	H-11
IC259	H-11
IC260	H-12
IC261	J-13
IC262	J-12
IC263	J-14
IC264	J-15
IC265	H-15
IC266	H-15
IC267	H-17
IC268	F-20
IC269	G-20
IC270	E-20
IC271	F-20
IC272	G-21
IC273	G-20
IC274	H-13
TH10	G-22
TP10	A-18
TP11	A-20
TP12	F-19

WKG-4: BASIC WIPE BOARD S/N: 10001 through 10030



WKG-4; BASIC WIPE BOARD S/N: 10001 through 10030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A
B
C
D
E
F
G
H
J
WKG-4
WIPE(ME1)
WIPE(ME2)
A
DIP
A NO.
CONTROL
1-636-508-11
YWP-C
WKG-4
SONY
MADE IN JAPAN
LOT NO.
S No.
CN101
CN102
CN130
CN131
CN132
CN133
CN134
CN201
CN202
CN230
CN231
CN232
CN233
CN234
CNX
CNY

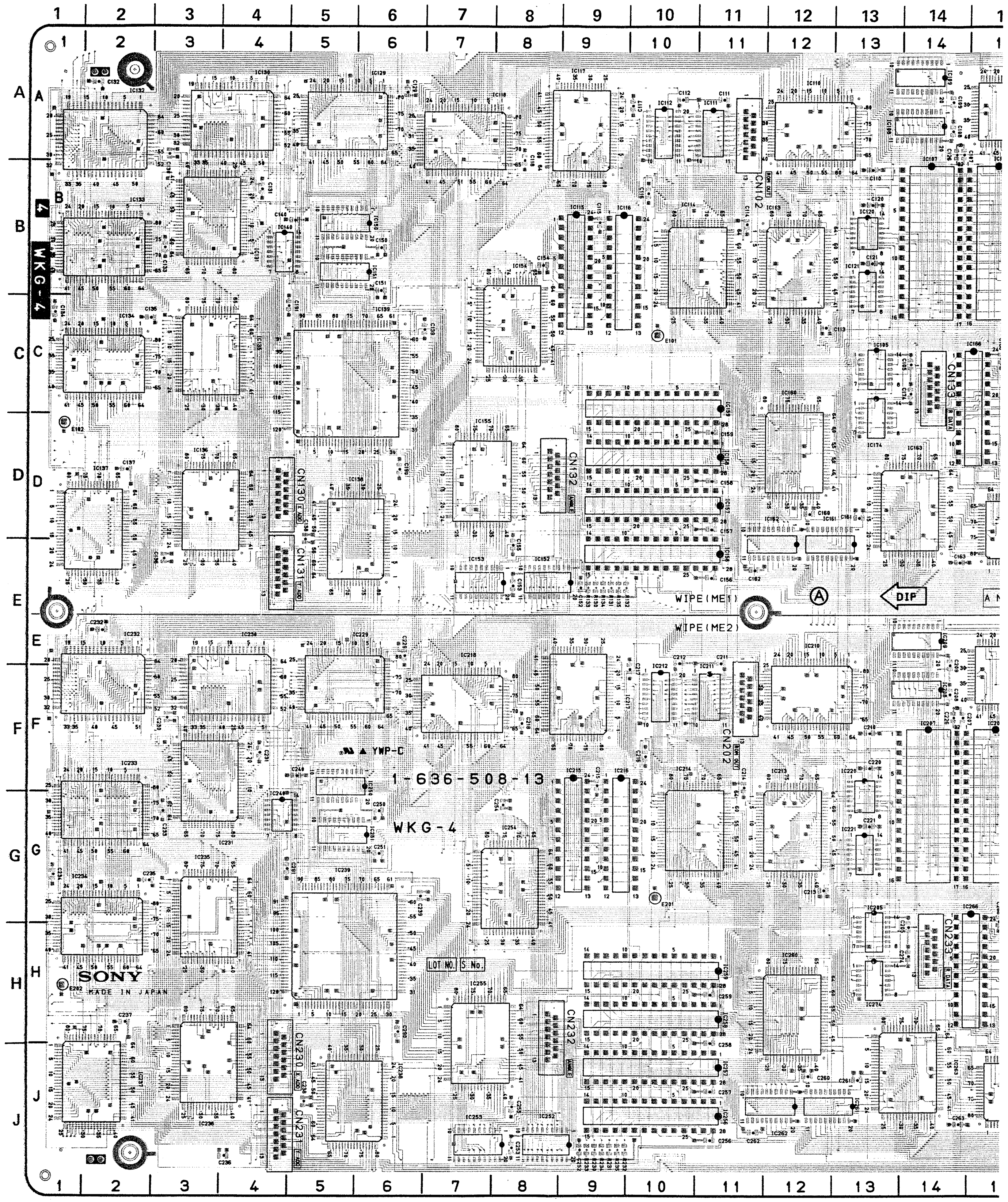
WKG-4 -A SIDE-
1-636-508-11
DVS-8000

DVS-8000

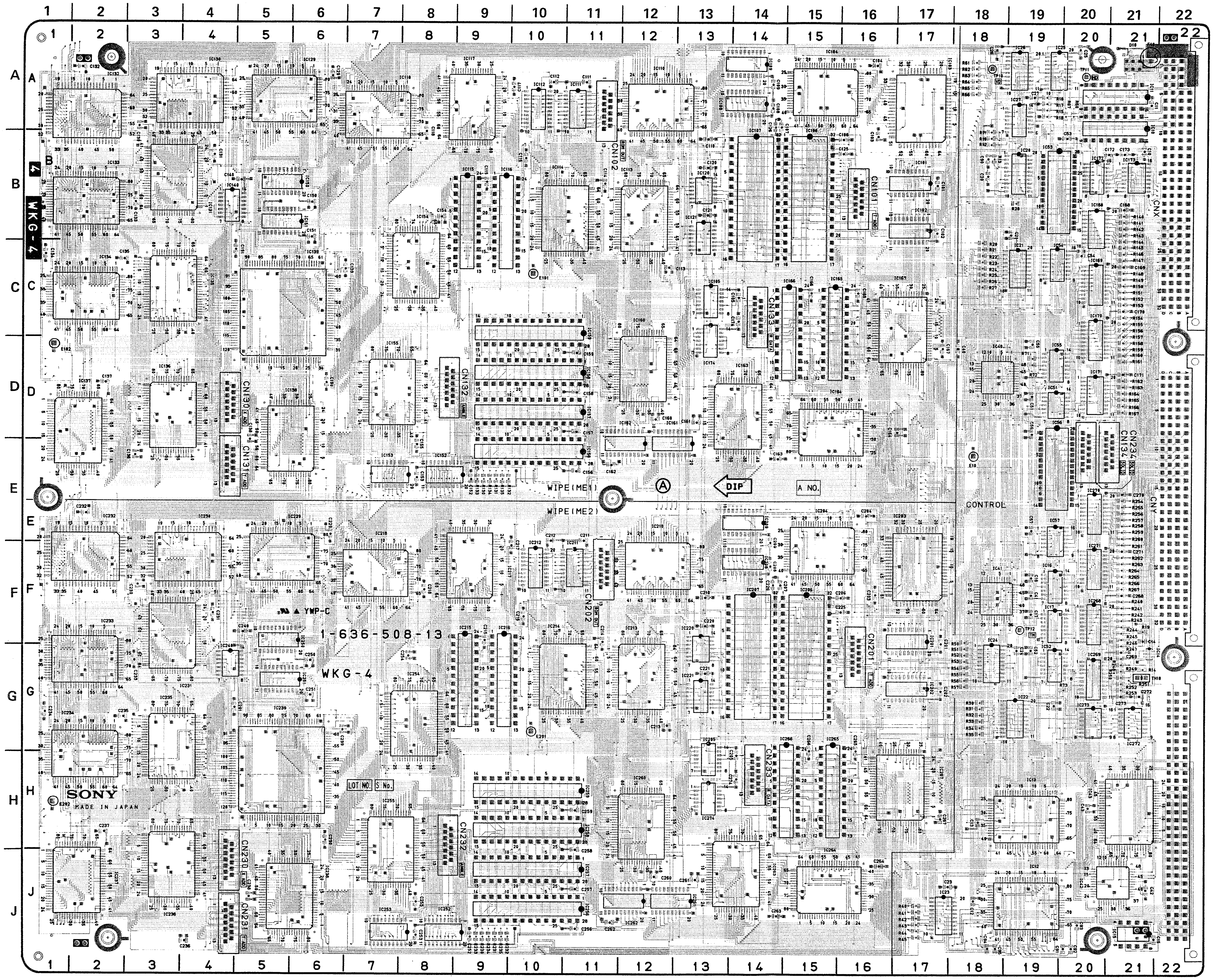
WKG-4 (1-636-508-12, 13)

CNX1	B-22
CNY1	E-22
CNZ1	H-22
CN101	B-16
CN102	B-11
CN130	D-5
CN131	E-5
CN132	D-9
CN133	C-14
CN134	E-21
CN201	G-16
CN202	F-11
CN230	J-5
CN231	J-5
CN232	H-9
CN233	H-14
CN234	E-21
D10	A-21
E10	E-18
E101	C-10
E102	D-1
E201	G-10
E202	H-1
F10	A-21
IC10	A-21
IC11	A-21
IC12	J-19
IC13	H-19
IC14	G-22
IC15	J-21
IC16	F-19
IC17	F-19
IC20	B-19
IC21	C-19
IC22	G-19
IC23	J-17
IC24	G-18
IC25	A-19
IC26	A-19
IC27	A-19
IC40	D-18
IC41	F-18
IC42	J-20
IC43	H-20
IC51	D-19
IC52	G-19
IC53	B-19
IC54	C-19
IC55	D-19
IC56	D-19
IC57	E-19
IC101	B-17
IC102	B-17
IC103	A-17
IC104	A-15
IC105	C-13
IC106	B-15
IC107	B-14
IC108	A-13
IC109	A-14
IC110	A-12
IC111	A-11
IC112	A-12
IC113	B-12
IC114	B-10
IC115	B-9
IC116	B-9
IC117	A-9
IC118	A-7
IC120	B-13
IC121	B-13
IC129	A-6
IC130	A-4
IC131	B-4
IC132	A-2
IC133	B-2
IC134	C-2
IC135	C-4
IC136	D-3
IC137	D-2
IC138	D-5
IC139	C-6
IC140	B-4
IC150	B-5
IC151	B-5
IC152	E-8
IC153	E-7
IC154	B-8
IC155	D-7
IC156	E-11
IC157	D-11
IC158	D-11
IC159	C-11
IC160	D-12
IC161	D-12
IC162	D-12
IC163	D-14
IC164	D-15
IC165	C-15
IC166	C-15
IC167	C-17
IC168	B-20
IC169	C-20
IC170	C-20
IC171	D-20
IC172	B-20
IC173	B-21
IC174	D-13
IC201	F-17
IC202	G-17
IC203	E-17
IC204	E-15
IC205	G-13
IC206	F-15
IC207	F-14
IC208	F-14
IC209	E-14
IC210	E-12
IC211	F-11
IC212	F-10
IC213	F-12
IC214	G-10
IC215	F-9
IC216	F-9
IC217	F-9
IC218	E-7
IC220	F-13
IC221	G-13
IC229	E-5
IC230	E-4
IC231	G-3
IC232	E-2
IC233	F-2
IC234	G-2
IC235	G-3
IC236	J-3
IC237	J-2
IC238	J-6
IC239	G-5
IC240	G-4
IC250	F-5
IC251	G-5
IC252	J-8
IC253	J-7
IC254	G-8
IC255	H-7
IC256	J-11
IC257	J-11
IC258	H-11
IC259	H-11
IC260	H-12
IC261	J-13
IC262	J-12
IC263	J-14
IC264	J-15
IC265	H-15
IC266	H-15
IC267	H-17
IC268	F-20
IC269	G-20
IC270	E-20
IC271	F-20
IC272	G-21
IC273	G-20
IC274	H-13
TH10	G-22
TP10	A-18
TP11	A-20
TP12	F-19

WKG-4; BASIC WIPE BOARD S/N: 10031 and higher



WKG-4; BASIC WIPE BOARD S/N; 10031 and higher


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
A B C D E F G H J
WKG-4
WIPE(ME1)
WIPE(ME2)
Ⓐ
DIP
A NO.
CONTROL
CNX
CNY
YMP-C
1-636-508-13
WKG-4
SONY
MADE IN JAPAN
LOT NO.
S No.

WKG-4 -A SIDE-

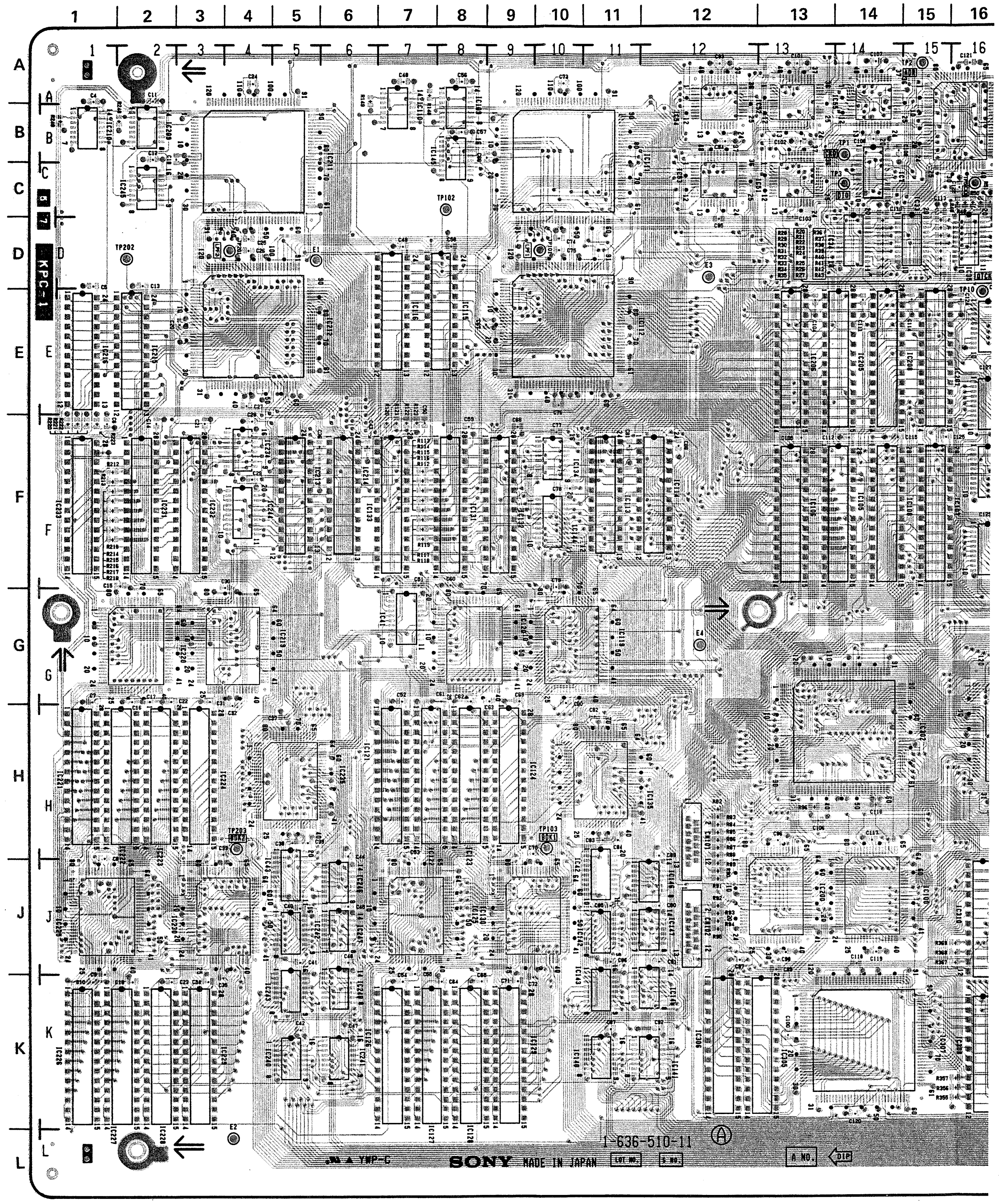
1-636-508-12, 13
DVS-8000

DVS-8000

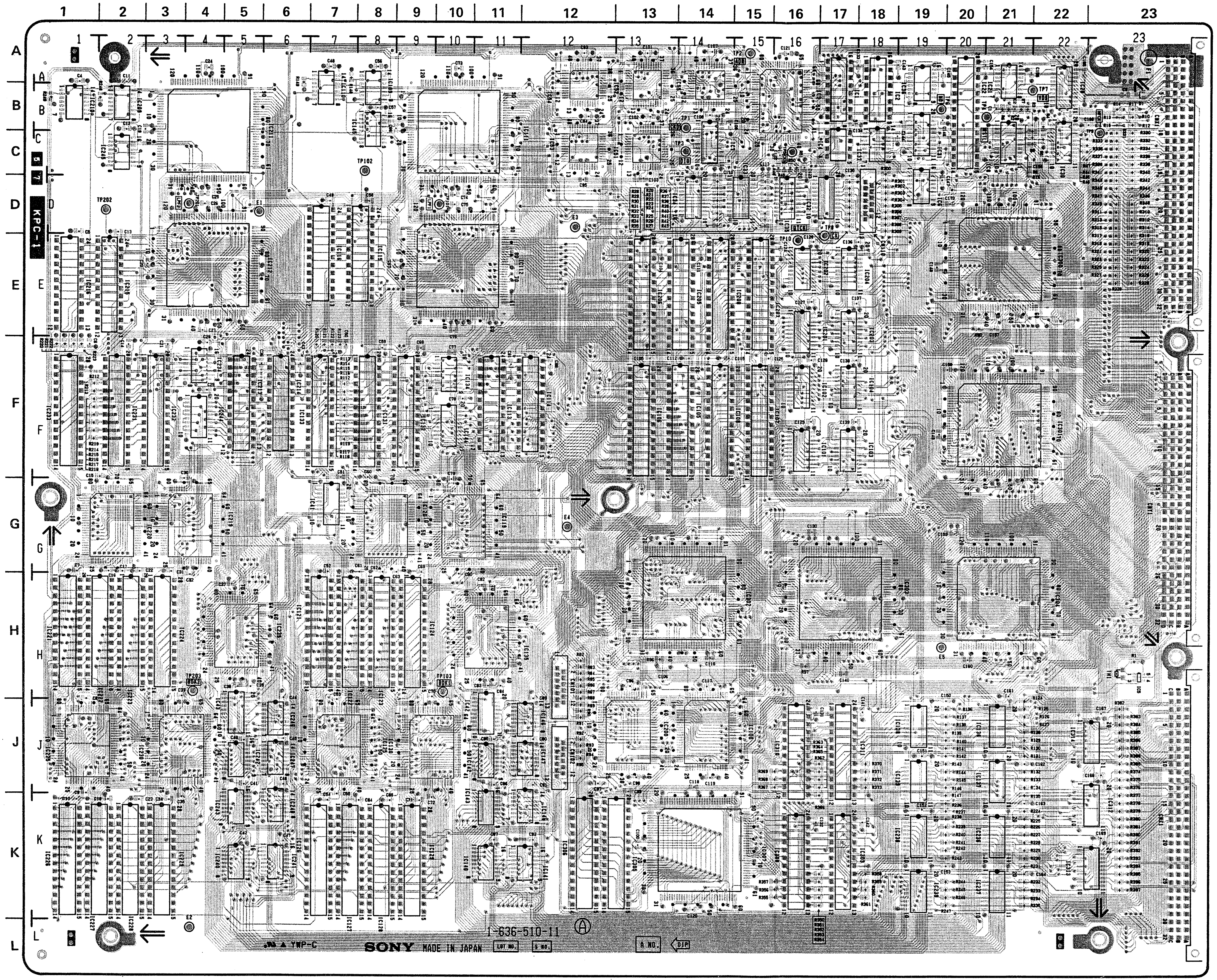
KPC-1 (1-636-510-11)

CNX1	B-23
CNY1	G-23
CNZ1	K-23
CN101	H-12
CN102	J-12
CN110	E-18
D1	B-23
E1	D-5
E2	L-4
E3	D-12
E4	G-12
E5	H-19
F1	A-23
IC1	B-17
IC2	B-18
IC3	B-19
IC4	C-17
IC5	H-23
IC6	D-19
IC7	C-14
IC8	C-21
IC20	B-22
IC21	B-21
IC22	B-20
IC30	C-22
IC31	C-19
IC32	D-16
IC33	C-15
IC34	D-13
IC35	D-16
IC36	B-19
IC37	C-17
IC41	G-7
IC42	J-10
IC43	J-4
IC51	C-13
IC52	B-13
IC53	C-12
IC54	B-12
IC55	B-13
IC100	J-15
IC101	F-17
IC102	F-17
IC103	F-18
IC104	F-18
IC105	F-14
IC106	F-13
IC107	F-16
IC108	F-15
IC109	B-8
IC110	B-7
IC111	C-12
IC112	E-11
IC113	F-11
IC114	F-12
IC115	E-8
IC116	E-7
IC119	G-11
IC120	G-9
IC121	H-6
IC122	H-7
IC123	H-8
IC124	H-9
IC125	J-8
IC126	K-6
IC127	K-7
IC128	K-8
IC129	K-9
IC130	J-8
IC131	F-8
IC132	F-9
IC133	F-1
IC134	F-1
IC135	H-12
IC136	J-21
IC137	J-21
IC138	J-19
IC139	J-19
IC140	K-10
IC141	K-12
IC142	J-10
IC143	J-10
IC144	F-10
IC145	B-7
IC146	J-12
IC147	J-12
IC148	K-12
IC200	J-13
IC201	E-17
IC202	E-17
IC203	E-18
IC204	E-18
IC205	E-14
IC206	E-13
IC207	E-16
IC208	E-15
IC209	B-2
IC210	B-1
IC211	B-6
IC212	E-6
IC213	F-5
IC214	F-6
IC215	E-2
IC216	E-1
IC219	G-5
IC220	G-3
IC221	H-1
IC222	H-2
IC223	H-2
IC224	H-3
IC225	J-1
IC226	K-1
IC227	K-2
IC228	K-2
IC229	K-3
IC230	J-2
IC231	F-2
IC232	F-1
IC233	F-3
IC234	F-4
IC235	H-6
IC236	K-21
IC237	K-21
IC238	K-19
IC239	K-19
IC240	K-4
IC241	K-6
IC242	J-5
IC243	K-4
IC244	F-4
IC245	C-2
IC246	J-6
IC247	J-6
IC248	K-6
IC300	E-22
IC301	F-22
IC302	H-15
IC303	H-19
IC304	H-22
IC305	K-13
IC306	K-12
IC307	K-15
IC308	K-16
IC309	K-18
IC310	J-16
IC311	J-18
IC312	K-23
IC313	K-22
IC314	J-22
TH1	H-23
TP1	B-14
TP2	A-15
TP3	C-14
TP4	B-21
TP5	C-16
TP6	B-19
TP7	B-22
TP8	D-17
TP9	B-23
TP10	E-16
TP101	D-10
TP102	C-8
TP103	H-9
TP201	D-4
TP202	D-2
TP203	H-4

KPC-1; KEY PROCESSOR BOARD S/N; 10001 through 10030



KPC-1; KEY PROCESSOR BOARD S/N; 10001 through 10030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A
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G
H
J
K
L
KPC-1
1-636-510-11
SONY MADE IN JAPAN

KPC-1 -A SIDE-

1-636-510-11
DVS-8000

DVS-8000

KPC-1 (1-636-510-12)

CNX1	B-23
CNY1	G-23
CNZ1	K-23
CN101	H-12
CN102	J-12
CN110	E-18
D1	B-23
E1	D-5
E2	K-4
E3	D-12
E4	G-12
E5	H-19
F1	A-23
IC1	B-17
IC2	B-18
IC3	B-16
IC4	C-17
IC5	H-23
IC6	D-19
IC7	C-14
IC8	C-21
IC20	B-22
IC21	B-21
IC22	B-20
IC30	C-22
IC31	C-19
IC32	D-16
IC33	C-15
IC34	D-13
IC35	D-16
IC36	B-19
IC37	C-18
IC41	G-7
IC42	J-10
IC43	J-4
IC51	C-13
IC52	B-13
IC53	C-12
IC54	B-12
IC55	B-13
IC100	J-15
IC101	F-17
IC102	F-17
IC103	F-18
IC104	F-18
IC105	F-14
IC106	F-13
IC107	F-16
IC108	F-15
IC109	B-8
IC110	B-7
IC111	C-12
IC112	E-12
IC113	F-11
IC114	F-12
IC115	E-8
IC116	E-7
IC119	G-11
IC120	G-9
IC121	H-6
IC122	H-7
IC123	H-8
IC124	H-10
IC125	J-8
IC126	K-6
IC127	K-7
IC128	K-8
IC129	K-10
IC130	J-8
IC131	F-8
IC132	F-9
IC133	F-6
IC134	F-10
IC135	H-12
IC136	J-21
IC137	J-21
IC138	J-19
IC139	J-19
IC140	K-10
IC141	K-12
IC142	J-10
IC143	J-10
IC144	F-10
IC145	B-7
IC146	J-12
IC147	J-12
IC148	K-12
IC200	J-13
IC201	E-17
IC202	E-17
IC203	E-18
IC204	E-18
IC205	E-14
IC206	E-13
IC207	E-16
IC208	E-15
IC209	B-2
IC210	B-1
IC211	B-6
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IC213	F-5
IC214	F-6
IC215	E-2
IC216	E-1
IC219	G-5
IC220	G-3
IC221	H-1
IC222	H-2
IC223	H-2
IC224	H-4
IC225	J-1
IC226	K-1
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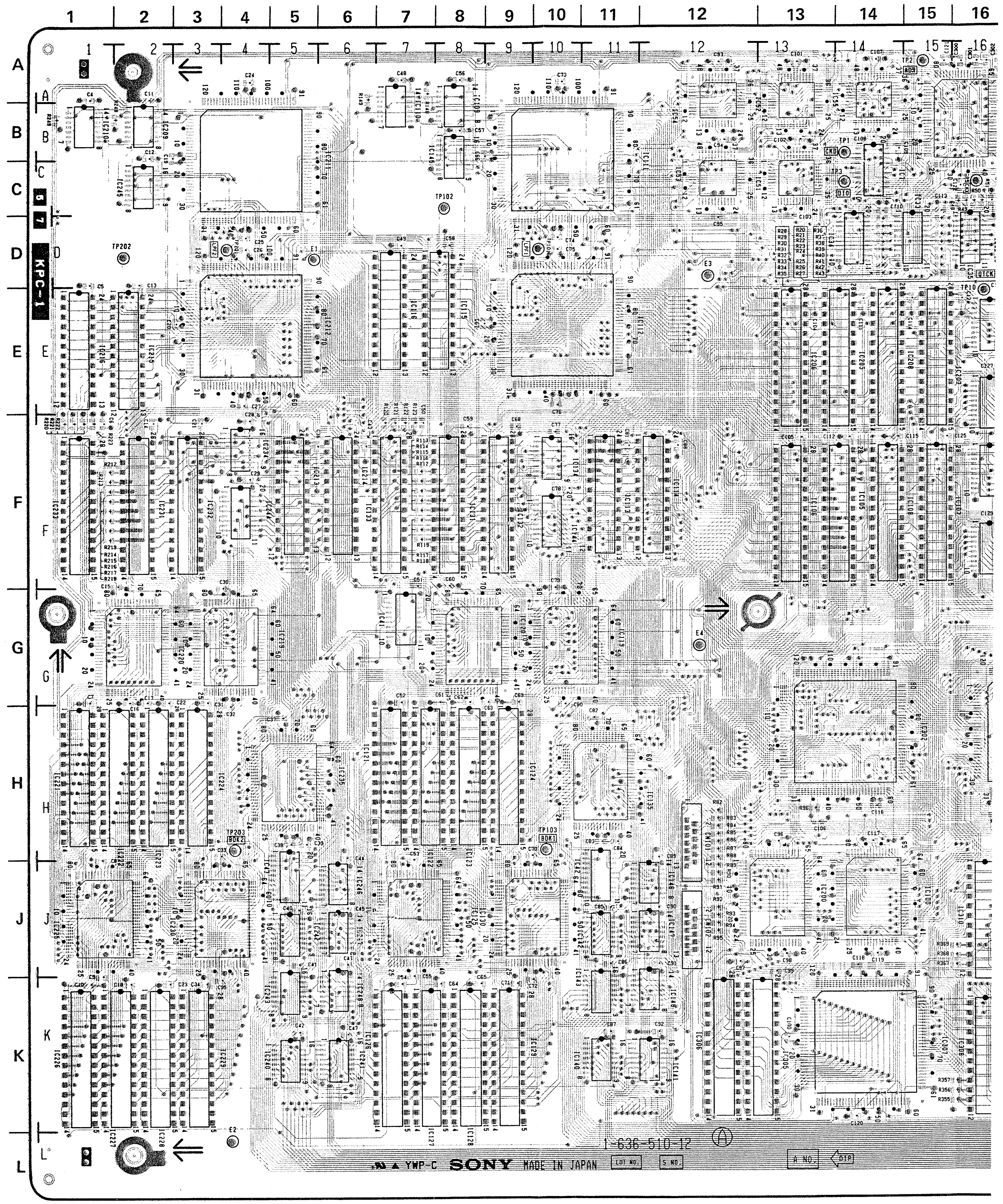
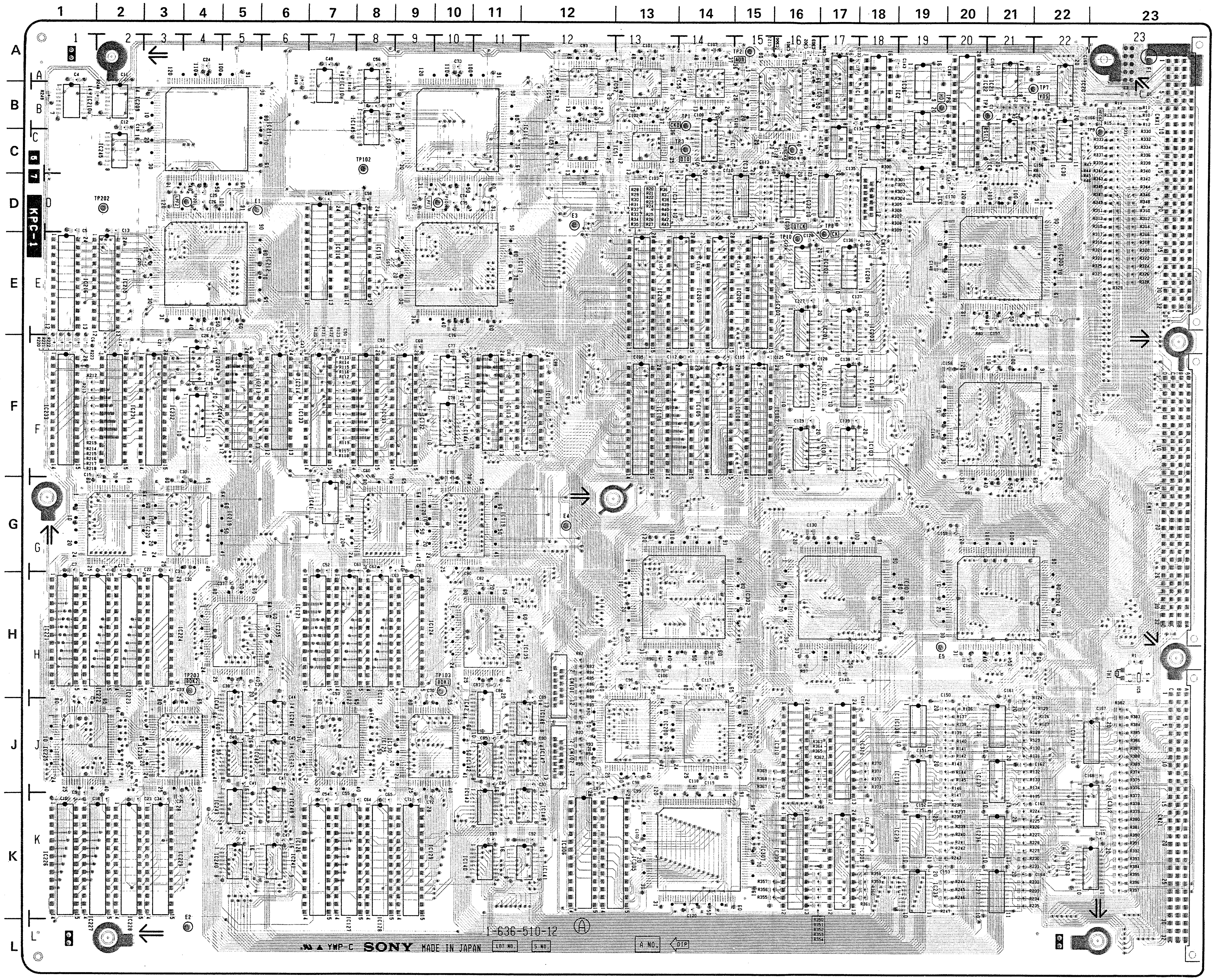
IC228	L-2
IC229	K-4
IC230	J-2
IC231	F-2
IC232	F-3
IC233	F-1
IC234	F-4
IC235	H-6
IC236	K-21
IC237	K-21
IC238	K-19
IC239	K-19
IC240	K-4
IC241	K-6
IC242	J-6
IC243	K-4
IC244	F-4
IC245	C-2
IC246	J-6
IC247	J-6
IC248	K-6
IC300	E-22
IC301	F-22
IC302	H-15
IC303	H-19
IC304	H-22
IC305	K-13
IC306	K-12
IC307	K-15
IC308	K-16
IC309	K-18
IC310	J-16
IC311	J-18
IC312	K-23
IC313	K-22
IC314	J-22
TH1	H-23
TP1	B-14
TP2	A-15
TP3	C-14
TP4	B-20
TP5	C-16
TP6	B-20
TP7	A-22
TP8	D-17
TP9	B-23
TP10	E-16
TP101	D-10
TP102	C-8
TP103	H-10
TP201	D-4
TP202	D-2
TP203	H-4

KPC-1; KEY PROCESSOR BOARD S/N; 10031 and higher



KPC-1; KEY PROCESSOR BOARD

S/N; 10031 and higher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KPC-1
TP202
TP102
TP201
TP103
E1
E2
E3
E4
E5
1-636-510-12
YMP-C
SONY
MADE IN JAPAN
DIP

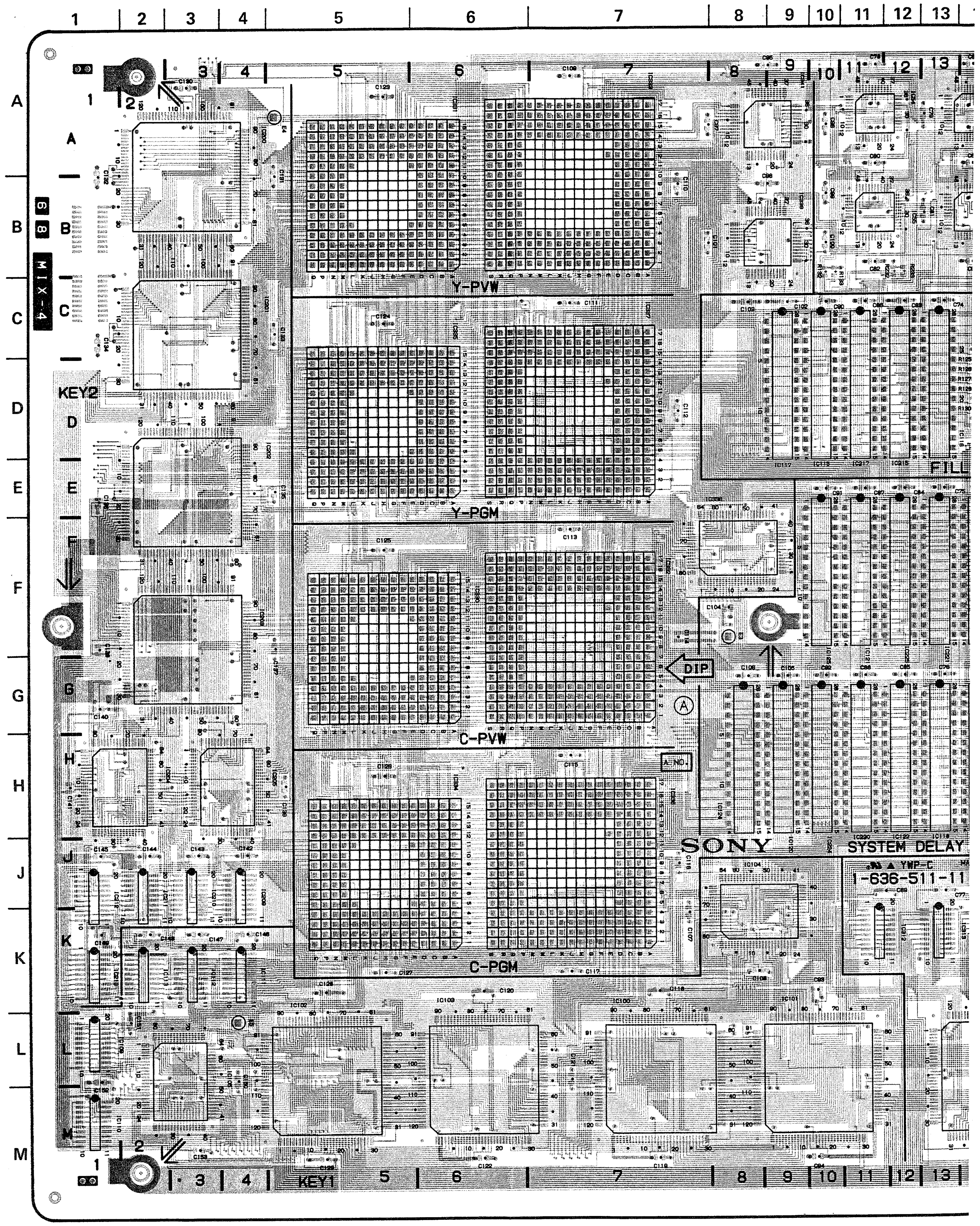
KPC-1 -A SIDE-
1-636-510-12
DVS-8000

DVS-8000

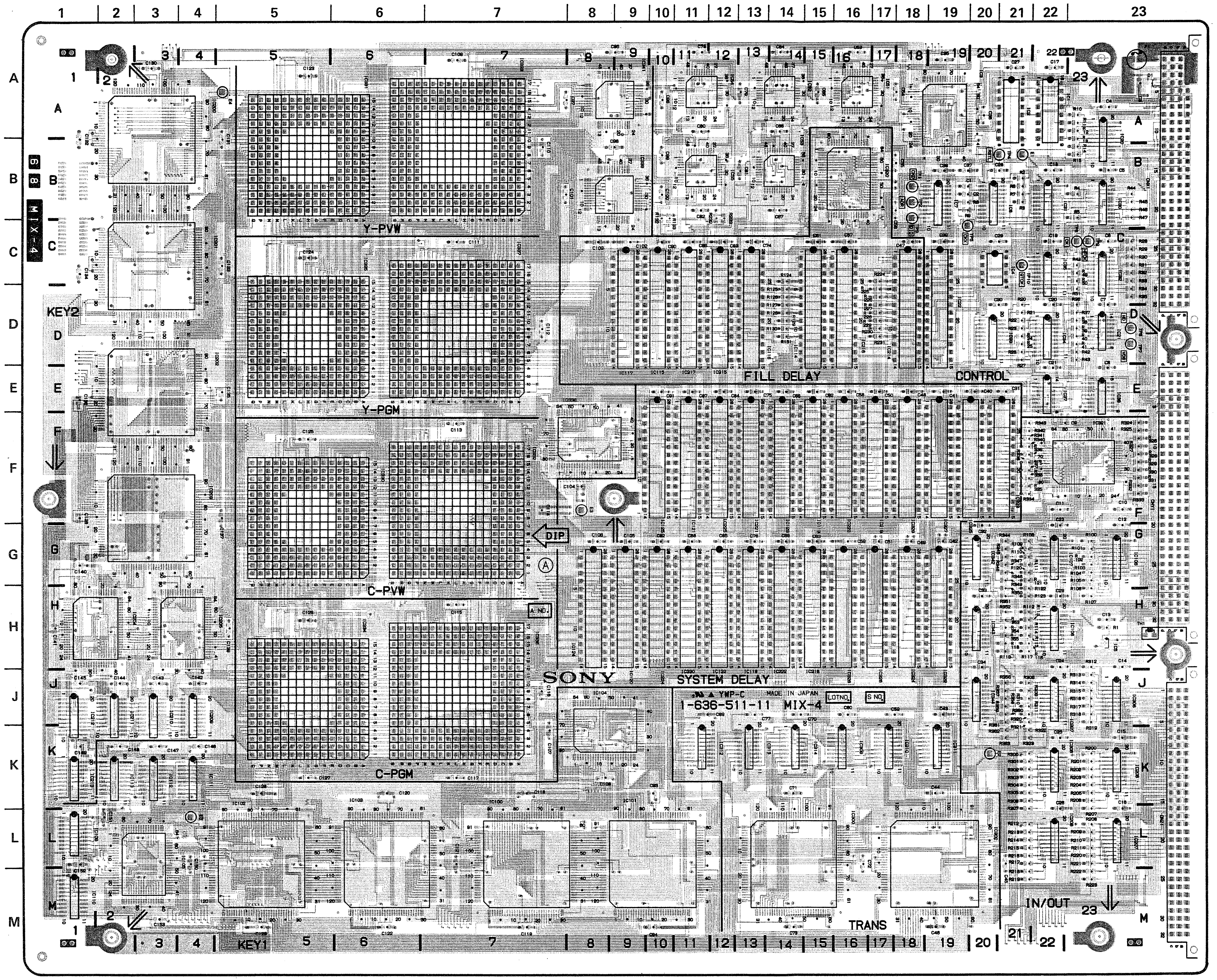
MIX-4 (1-636-511-11)

CNX1	B-23
CNY1	F-23
CNZ1	L-23
D-1	A-23
E1	B-20
E2	K-20
E3	F-8
E4	A-5
E5	L-4
F1	A-23
IC1	A-22
IC2	A-21
IC3	A-20
IC4	C-21
IC5	H-23
IC7	B-19
IC8	B-21
IC20	A-23
IC21	D-23
IC22	C-19
IC30	B-23
IC31	B-23
IC32	B-22
IC33	C-23
IC34	D-21
IC35	D-22
IC36	C-22
IC37	E-23
IC51	A-17
IC52	A-15
IC53	B-14
IC54	A-12
IC55	B-12
IC100	K-7
IC101	K-9
IC102	K-5
IC103	K-6
IC104	J-8
IC105	L-4
IC106	G-23
IC107	G-22
IC108	H-22
IC109	L-1
IC110	M-1
IC111	K-4
IC112	K-3
IC113	K-2
IC114	D-14
IC115	E-10
IC116	D-13
IC117	E-9
IC118	H-13
IC119	F-15
IC120	H-9
IC121	F-11
IC122	H-12
IC123	F-14
IC124	H-8
IC125	F-10
IC200	A-4
IC201	C-4
IC202	D-4
IC203	F-4
IC204	H-2
IC205	H-4
IC206	K-23
IC207	L-23
IC208	L-22
IC209	J-4
IC210	J-3
IC211	J-2
IC212	J-1
IC213	K-1
IC214	D-17
IC215	E-12
IC216	D-16
IC217	E-11
IC218	H-15
IC219	F-17
IC220	H-11
IC221	F-13
IC222	H-14
IC223	F-16
IC224	H-10
IC225	F-12
IC300	L-20
IC302	L-16
IC306	K-22
IC307	J-22
IC308	J-23
IC309	K-16
IC310	K-18
IC311	K-19
IC312	K-11
IC313	K-13
IC314	K-14
IC320	B-17
IC321	F-23
IC322	H-19
IC323	F-21
IC324	H-18
IC325	F-20
IC326	H-17
IC327	F-19
IC328	H-16
IC329	F-18
IC330	F-6
IC331	A-6
IC332	F-7
IC333	A-7
IC334	H-6
IC335	D-6
IC336	H-7
IC337	C-7
IC338	E-8
IC339	B-9
IC341	A-9
IC342	F-20
IC343	H-20
IC344	J-20
TH1	H-23
TP1	B-18
TP2	B-18
TP3	C-18
TP4	B-21
TP5	C-21
TP6	D-23
TP7	D-23
TP8	C-23
TP9	C-23
TP10	C-21

MIX-4; MIXER BOARD S/N; 10001 through 10030



MIX-4; MIXER BOARD S/N; 10001 through 10030


Y-PVW
Y-PGM
C-PVW
C-PGM
FILL DELAY
CONTROL
SYSTEM DELAY
TRANS
IN/OUT
KEY1
KEY2
DIP
SONY
1-636-511-11 MIX-4
MADE IN JAPAN
LOT NO.
S NO.
MIX-4

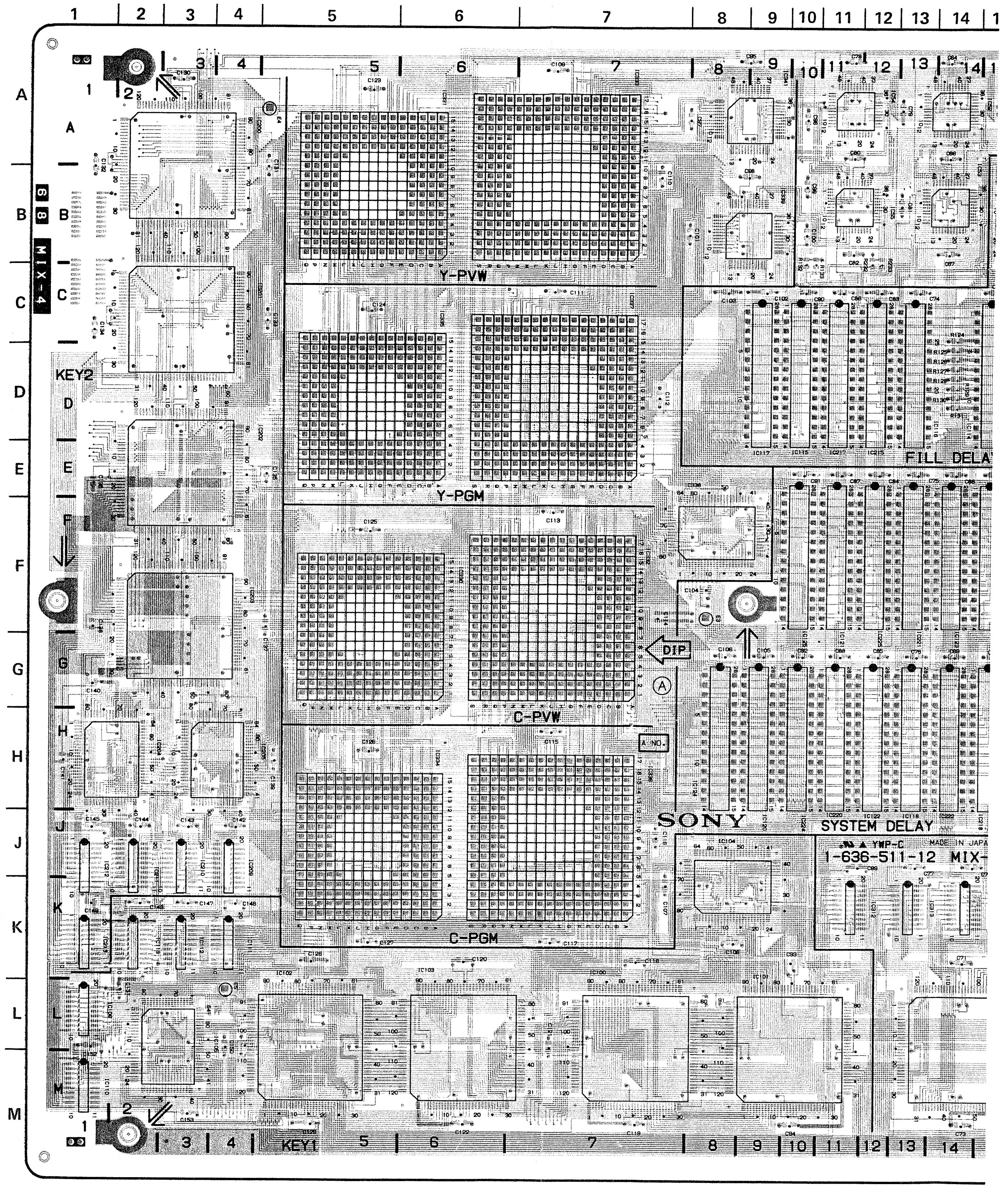
MIX-4 -A SIDE-
1-636-511-11
DVS-8000

DVS-8000

MIX-4 (1-636-511-12)

CNX1	B-23
CNY1	F-23
CNZ1	L-23
D1	A-23
E1	B-20
E2	K-20
E3	F-8
E4	A-5
E5	L-4
F1	A-23
IC1	A-22
IC2	A-21
IC3	A-20
IC4	C-21
IC5	H-23
IC7	B-19
IC8	B-21
IC20	B-23
IC21	D-23
IC22	C-19
IC30	B-23
IC31	B-22
IC32	C-23
IC33	D-20
IC34	D-22
IC35	C-22
IC36	E-23
IC37	E-22
IC51	A-17
IC52	A-15
IC53	B-14
IC54	A-12
IC55	B-12
IC100	K-7
IC101	K-9
IC102	K-5
IC103	K-6
IC104	J-8
IC105	L-4
IC106	G-23
IC107	G-22
IC108	H-22
IC109	L-1
IC110	M-1
IC111	K-4
IC112	K-3
IC113	K-2
IC114	D-14
IC115	E-10
IC116	D-13
IC117	E-9
IC118	H-13
IC119	F-15
IC120	H-9
IC121	F-11
IC122	H-12
IC123	F-14
IC124	H-8
IC125	F-10
IC200	A-4
IC201	C-4
IC202	D-4
IC203	F-4
IC204	H-2
IC205	H-4
IC206	K-23
IC207	L-23
IC208	L-22
IC209	J-4
IC210	J-3
IC211	J-2
IC212	J-1
IC213	K-1
IC214	D-17
IC215	E-12
IC216	D-16
IC217	E-11
IC218	H-15
IC219	F-17
IC220	H-11
IC221	F-13
IC222	H-14
IC223	F-16
IC224	H-10
IC225	F-12
IC300	L-16
IC302	L-20
IC306	K-22
IC307	J-22
IC308	J-23
IC309	K-16
IC310	K-18
IC311	K-19
IC312	K-14
IC313	K-14
IC314	K-15
IC320	B-17
IC321	F-23
IC322	H-19
IC323	F-21
IC324	H-18
IC325	F-20
IC326	H-17
IC327	F-19
IC328	H-16
IC329	F-18
IC330	F-6
IC331	A-6
IC332	F-7
IC333	A-7
IC334	H-6
IC335	C-6
IC336	H-7
IC337	C-7
IC338	E-8
IC339	B-9
IC341	A-9
IC342	G-20
IC343	H-20
IC344	J-20
JW1	D-20
TH1	H-23
TP1	B-18
TP2	B-18
TP3	C-18
TP4	B-21
TP5	C-20
TP6	D-23
TP7	D-23
TP8	C-23
TP9	C-23
TP10	C-21

MIX-4; MIXER BOARD S/N; 10031 and higher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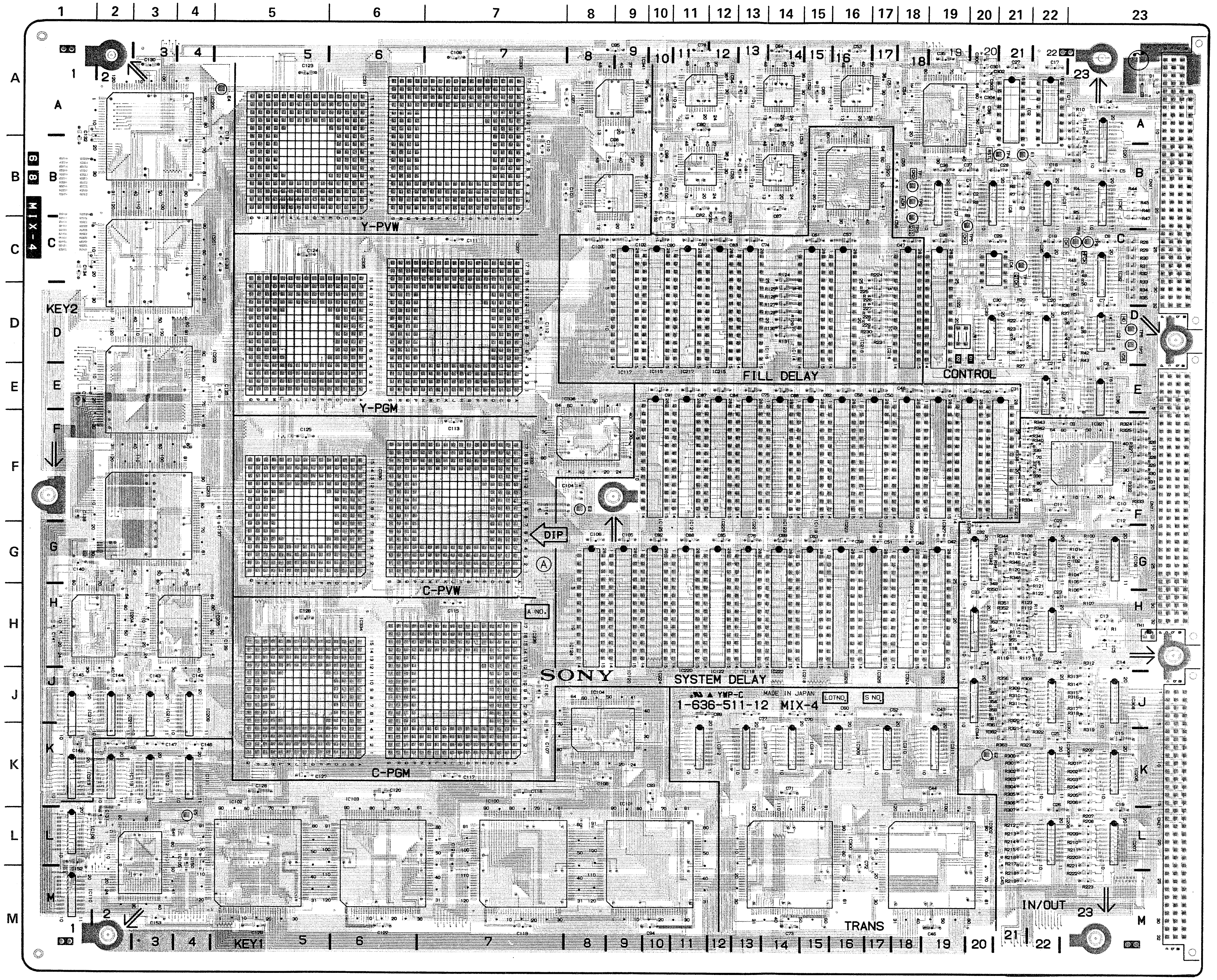
M
KEY2
KEY1
Y-PVW
Y-PGM
C-PVW
C-PGM
FILL DELA
SYSTEM DELAY
DIP
A NO.
SONY
YWP-C
MADE IN JAPA
1-636-511-12 MIX-
MIX-4

MIX-4; MIXER BOARD S/N; 10031 and higher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M
MIX-4
KEY2
KEY1
Y-PVW
Y-PGM
C-PVW
C-PGM
FILL DELAY
CONTROL
SYSTEM DELAY
TRANS
IN/OUT
DIP
A NO.
SONY
YMP-C
MADE IN JAPAN
LOT NO.
S NO.
1-636-511-12 MIX-4

MIX-4 -A SIDE-
1-636-511-12
DVS-8000

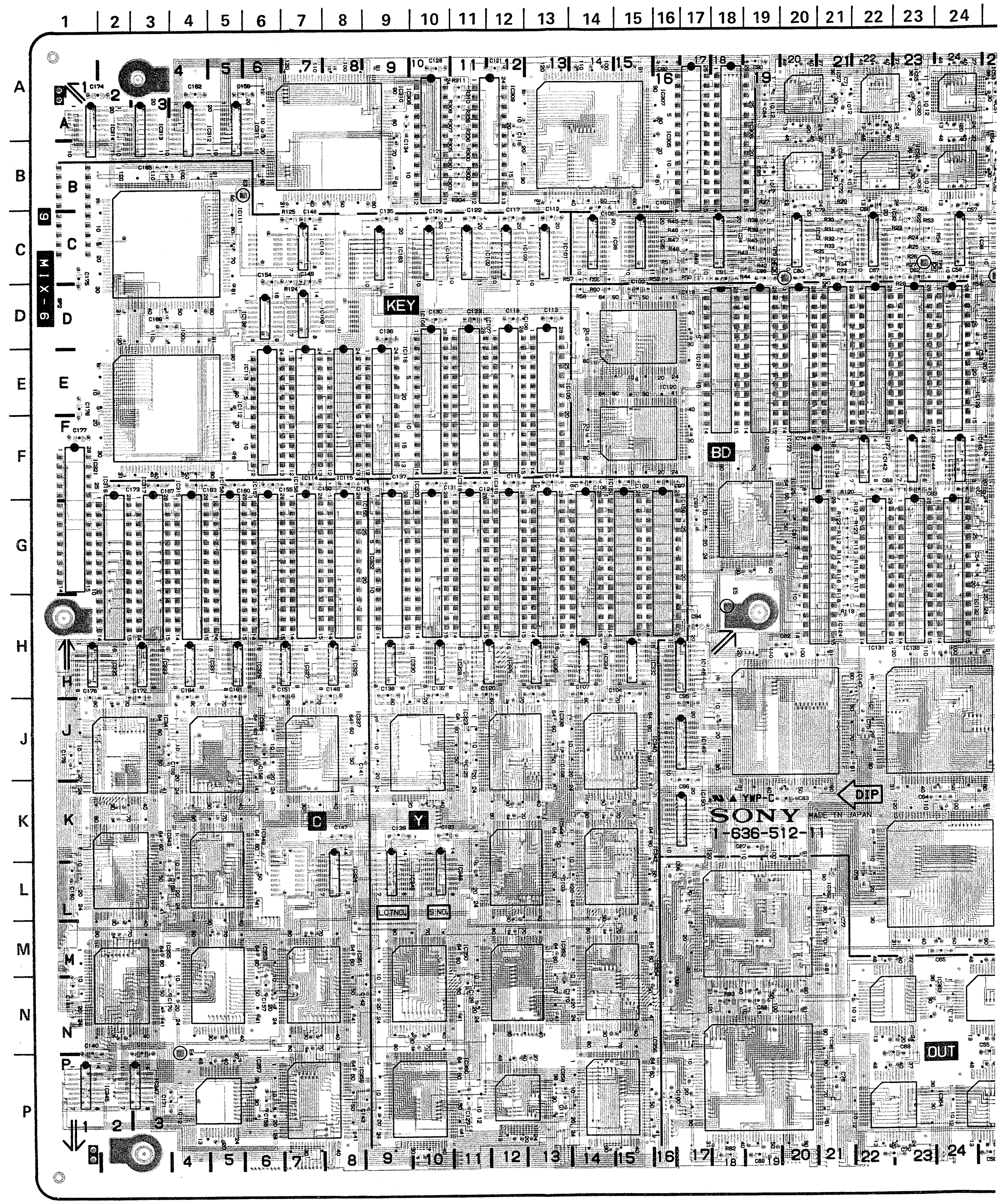
DVS-8000

MIX-6 (1-636-512-11)

CNX1	C-33
CNY1	H-33
CNZ1	L-33
CN100	D-32
CN110	N-33
D1	A-33
E1	D-28
E2	N-29
E3	B-5
E4	P-4
E5	H-18
F1	A-33
IC1	A-31
IC2	A-30
IC3	A-29
IC4	B-30
IC5	K-33
IC6	A-27
IC7	B-27
IC8	C-30
IC9	C-26
IC20	B-32
IC21	C-29
IC22	C-33
IC30	C-32
IC31	C-25
IC32	C-22
IC33	C-20
IC34	C-18
IC35	C-15
IC36	C-28
IC37	C-27
IC38	C-24
IC39	C-14
IC51	A-26
IC52	D-26
IC53	A-24
IC54	B-24
IC55	A-22
IC56	B-22
IC57	A-20
IC58	B-20
IC100	D-28
IC101	C-13
IC102	C-11
IC103	C-12
IC104	C-10
IC105	D-13
IC106	D-12
IC107	D-11
IC108	D-10
IC109	D-7
IC110	C-7
IC111	C-4
IC112	E-5
IC113	E-6
IC114	F-7
IC115	F-8
IC116	E-9
IC119	D-16
IC120	F-16
IC121	F-18
IC122	F-19
IC123	F-20
IC124	H-21
IC125	F-20
IC126	D-21
IC127	E-2
IC128	E-23
IC129	E-24
IC130	E-26
IC131	H-22
IC132	H-24
IC133	H-23
IC134	F-21
IC135	F-26
IC136	G-26
IC138	D-6
IC139	F-28
IC140	H-27
IC141	H-27
IC142	H-25
IC143	F-22
IC144	F-23
IC145	F-24
IC146	K-25
IC147	H-22
IC148	H-17
IC149	J-17
IC150	K-17
IC151	F-33
IC152	F-33
IC153	F-32
IC155	G-8
IC156	G-7
IC157	G-6
IC158	G-5
IC159	G-16
IC160	G-10
IC161	G-14
IC162	G-13
IC163	C-9
IC300	E-31
IC301	G-31
IC302	J-31
IC303	K-29
IC304	L-31
IC305	B-17
IC306	B-18
IC307	A-16
IC308	A-10
IC309	A-12
IC310	A-9
IC311	A-5
IC312	A-4
IC313	A-3
IC314	A-1
IC315	G-4
IC316	E-11
IC317	G-3
IC318	E-10
IC319	G-2
IC320	G-9
IC321	F-1
IC322	G-9
IC323	J-11
IC324	L-8
IC325	H-8
IC326	H-12
IC327	H-7
IC328	H-11
IC329	H-6
IC330	H-10
IC331	H-5
IC332	H-15
IC333	H-3
IC334	H-14
IC335	H-2
IC336	H-13
IC337	J-7
IC338	J-13
IC339	J-6
IC340	J-15
IC341	J-2
IC342	K-14
IC343	K-3
IC344	K-12
IC345	P-1
IC346	L-10
IC347	P-3
IC348	L-11
IC349	K-5
IC350	N-11
IC351	N-8
IC352	N-12
IC353	N-6
IC354	N-14
IC355	N-2
IC356	P-14
IC357	P-6
IC358	P-12
IC359	P-8
IC360	P-11
IC361	P-19
IC362	L-19
IC363	N-22
IC364	P-22
IC365	N-25
IC366	P-25
IC367	N-29
IC368	P-27
IC369	P-29
IC370	N-27
IC371	N-31
IC372	P-31
IC373	L-32
IC374	J-32
IC375	L-32
IC376	N-32
IC377	P-32
TP1	B-28
TP2	B-28
TP3	B-28
TP4	B-29
TP5	D-31
TP6	B-29
TP7	D-29
TP8	C-23
TP9	C-20
TP10	C-25

MIX-6; DSK (DOWNSTREAM KEYER) BOARD

S/N; 10001 through 10030



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L-8
H-8
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H-6
H-10
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J-6
J-15
J-
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K
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P
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P-22
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P-
P-29
N-27
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J-32
L-32
N-
P-
B-2
B-28
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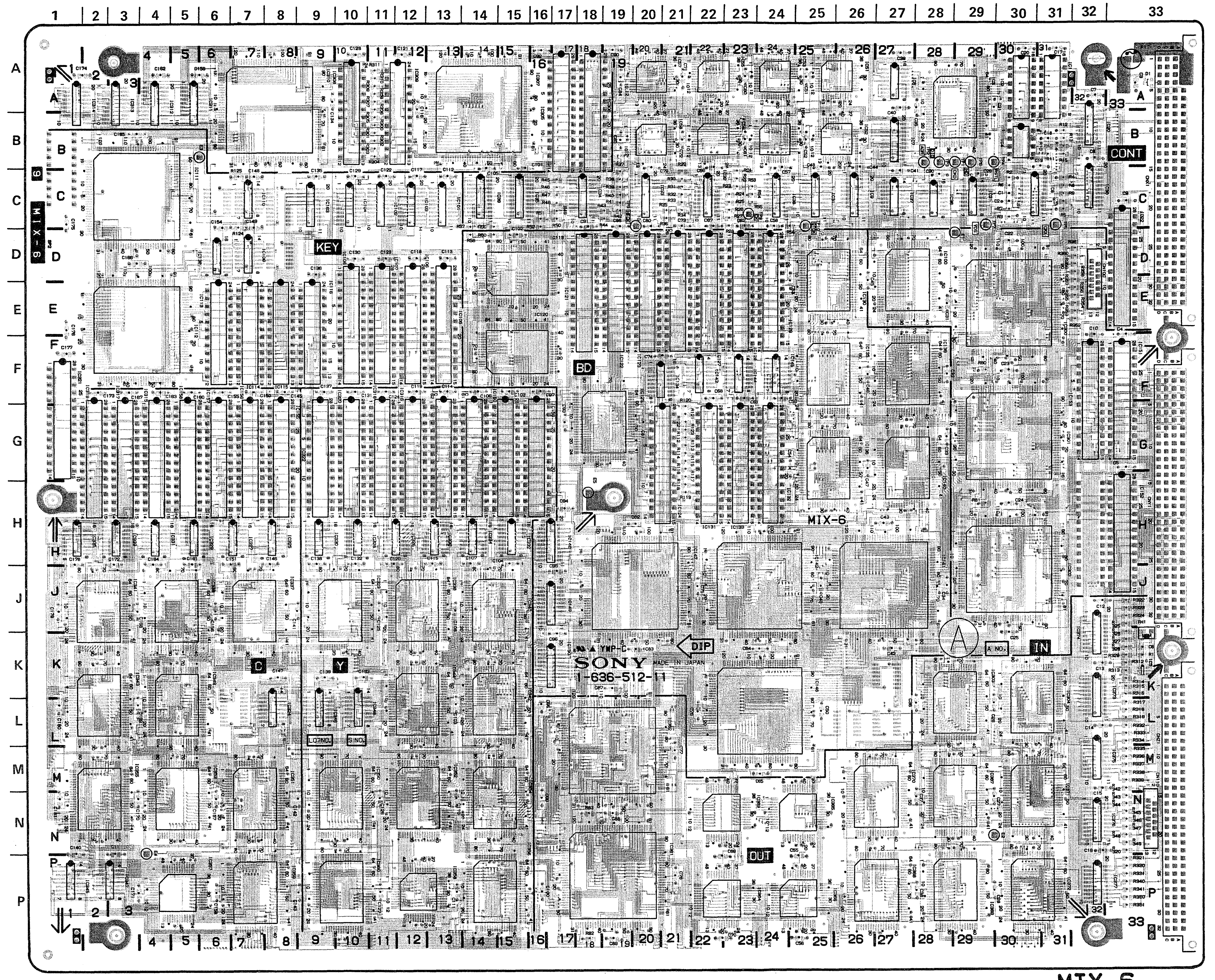
B-29
D-29
C-2
C
C

MIX-6; DSK (DOWNSTREAM KEYER) BOARD

S/N; 10001 through 10030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N
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MIX-6
KEY
BD
CONT
IN
OUT
DIP
C
Y
A
MIX-6
SONY
1-636-512-11
MADE IN JAPAN

MIX-6 -A SIDE-
1-636-512-11
DVS-8000

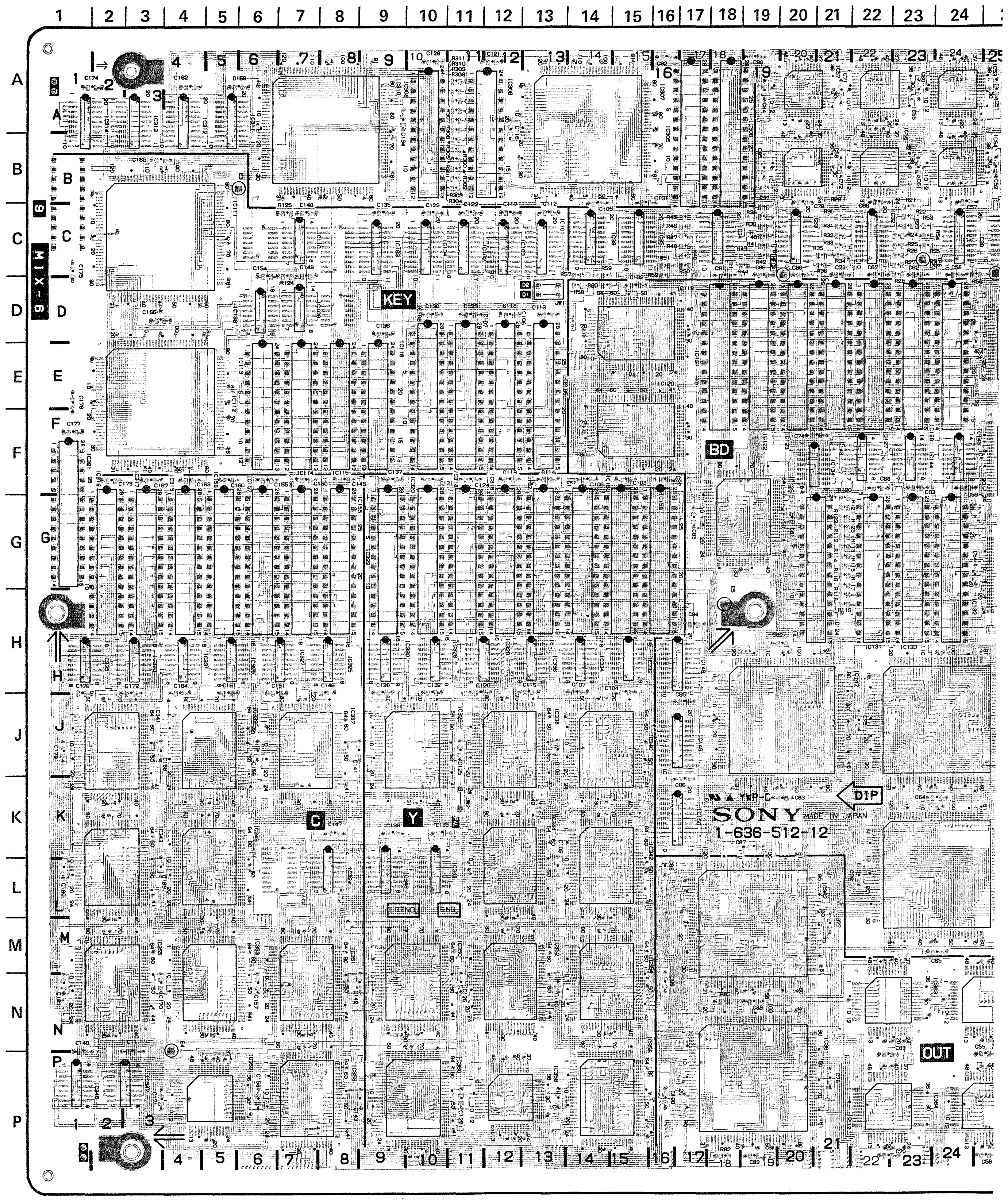
DVS-8000

MIX-6 (1-636-512-12)

CNX1	C-33
CNY1	H-33
CNZ1	L-33
CN100	D-32
CN110	M-33
D1	A-33
E1	D-29
E2	N-30
E3	B-6
E4	N-4
E5	H-18
F1	A-33
IC1	A-31
IC2	A-30
IC3	A-29
IC4	B-30
IC5	K-33
IC6	A-27
IC7	B-27
IC8	C-31
IC9	C-26
IC20	B-33
IC21	C-29
IC22	C-33
IC30	C-33
IC31	C-25
IC32	C-22
IC33	C-20
IC34	C-18
IC35	C-16
IC36	C-28
IC37	C-27
IC38	C-25
IC39	C-15
IC51	A-26
IC52	B-26
IC53	A-25
IC54	B-25
IC55	A-23
IC56	B-23
IC57	A-21
IC58	B-21
IC100	D-28
IC101	C-13
IC102	C-12
IC103	C-13
IC104	C-10
IC105	D-13
IC106	D-13
IC107	D-12
IC108	D-10
IC109	D-7
IC110	C-7
IC111	C-5
IC112	E-5
IC113	E-6
IC114	F-7
IC115	F-8
IC116	E-6
IC119	D-17
IC120	E-16
IC121	E-17
IC122	F-19
IC123	F-20
IC124	H-21
IC125	F-20
IC126	D-21
IC127	F-22
IC128	E-23
IC129	E-24
IC130	E-26
IC131	H-22
IC132	H-24
IC133	H-23
IC134	F-21
IC135	F-26
IC136	G-26
IC138	D-6
IC139	F-28
IC140	H-28
IC141	H-28
IC142	H-25
IC143	F-21
IC144	F-23
IC145	F-24
IC146	K-25
IC147	H-22
IC148	H-17
IC149	J-17
IC150	K-17
IC151	F-33
IC152	H-33
IC153	F-32
IC155	G-9
IC156	F-7
IC157	F-6
IC158	F-5
IC159	G-16
IC160	F-15
IC161	F-14
IC162	F-13
IC163	C-9
IC300	E-31
IC301	G-31
IC302	J-31
IC303	K-29
IC304	L-31
IC305	B-16
IC306	B-19
IC307	A-16
IC308	A-10
IC309	A-12
IC310	A-9
IC311	A-6
IC312	A-4
IC313	A-3
IC314	A-2
IC315	F-4
IC316	F-12
IC317	F-3
IC318	F-11
IC319	F-2
IC320	F-10
IC321	F-1
IC322	G-9
IC323	J-11
IC324	L-8
IC325	H-8
IC326	H-12
IC327	H-7
IC328	H-11
IC329	H-6
IC330	H-10
IC331	H-5
IC332	H-16
IC333	H-3
IC334	H-14
IC335	H-2
IC336	H-13
IC337	J-8
IC338	J-13
IC339	J-6
IC340	J-16
IC341	J-3
IC342	K-16
IC343	K-3
IC344	K-13
IC345	P-2
IC346	L-10
IC347	P-3
IC348	L-11
IC349	K-6
IC350	N-11
IC351	N-8
IC352	M-13
IC353	M-6
IC354	M-16
IC355	M-4
IC356	N-16
IC357	P-6
IC358	P-12
IC359	P-8
IC360	P-11
IC361	N-21
IC362	L-21
IC363	N-24
IC364	P-24
IC365	N-25
IC366	P-25
IC367	M-29
IC368	P-27
IC369	P-29
IC370	N-27
IC371	N-31
IC372	P-31
IC373	K-33
IC374	J-32
IC375	M-32
IC376	N-33
IC377	P-32
JW1	D-13
TH1	J-33
TP1	B-29
TP2	B-28
TP3	B-28
TP4	B-30
TP5	D-31
TP6	B-29
TP7	D-29
TP8	C-23
TP9	C-20
TP10	C-25

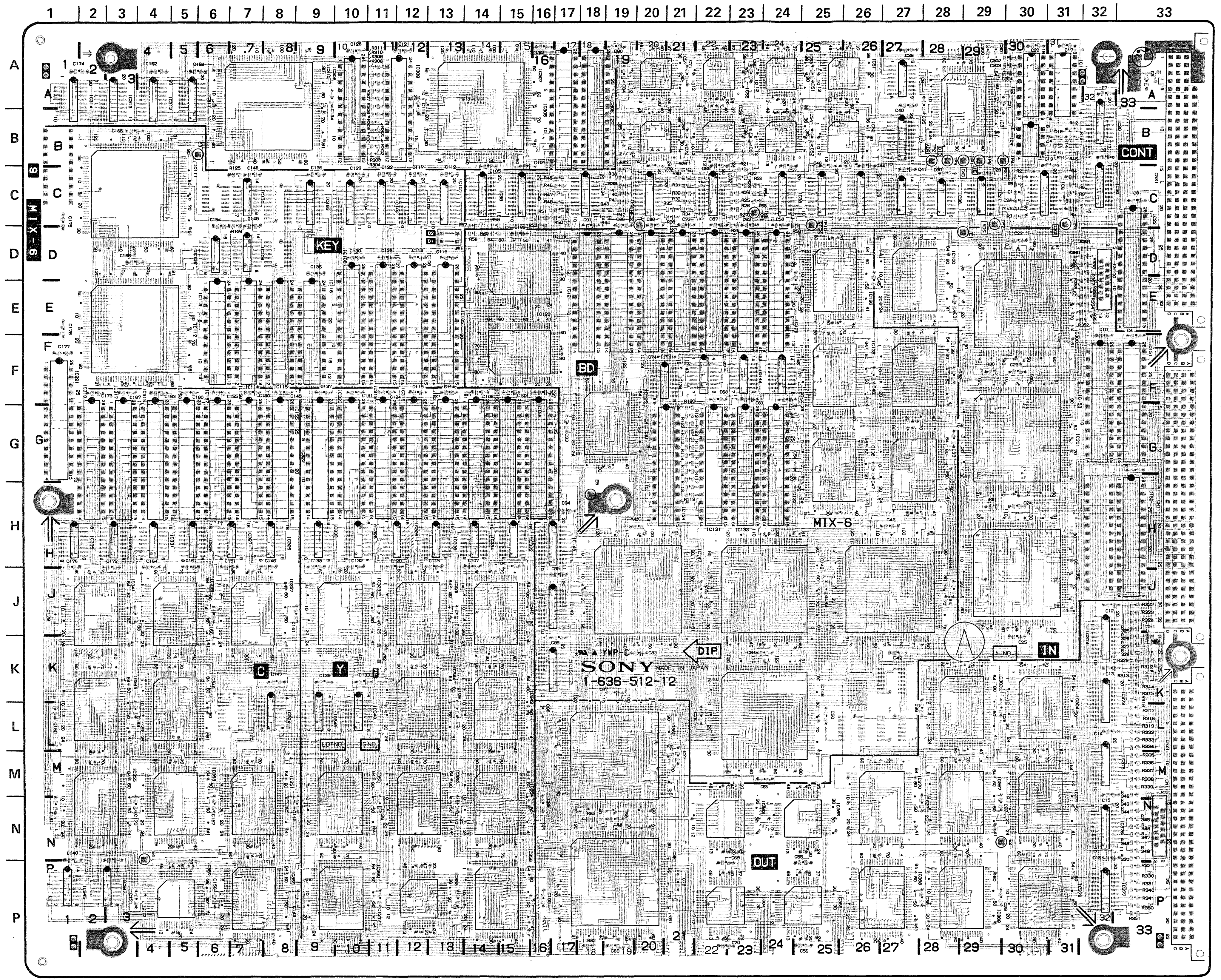
MIX-6; DSK (DOWNSTREAM KEYER) BOARD

S/N; 10031 and higher



MIX-6; DSK (DOWNSTREAM KEYER) BOARD

S/N; 10031 and higher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M
N
P
KEY
MIX-6
BD
CONT
IN
DIP
SONY
MADE IN JAPAN
1-636-512-12
YMP-C
A
C
Y
LOTNO
SNO
OUT

MIX-6 -A SIDE-

1-636-512-12
DVS-8000

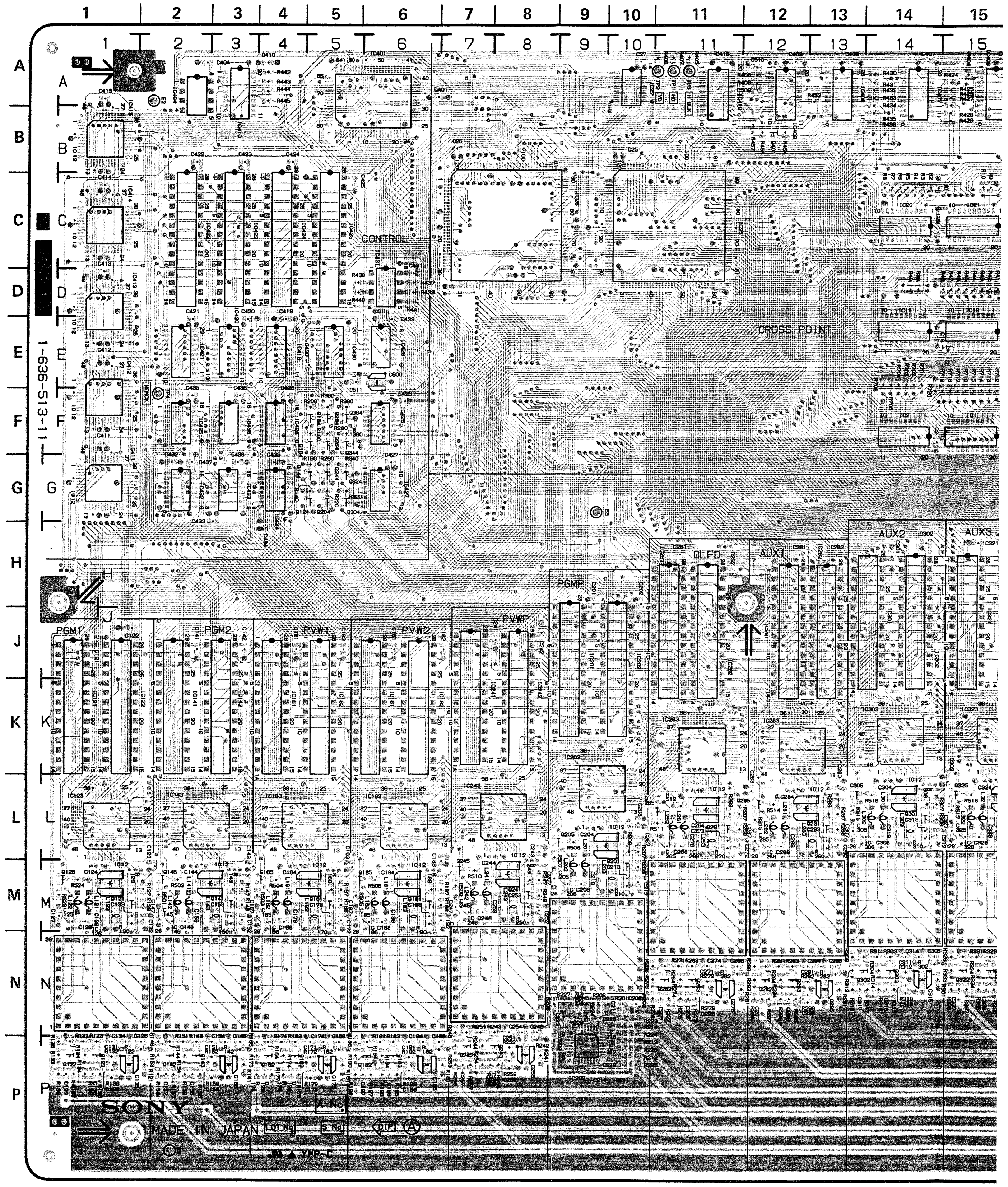
DVS-8000

OUT-1 (1-636-513-11)

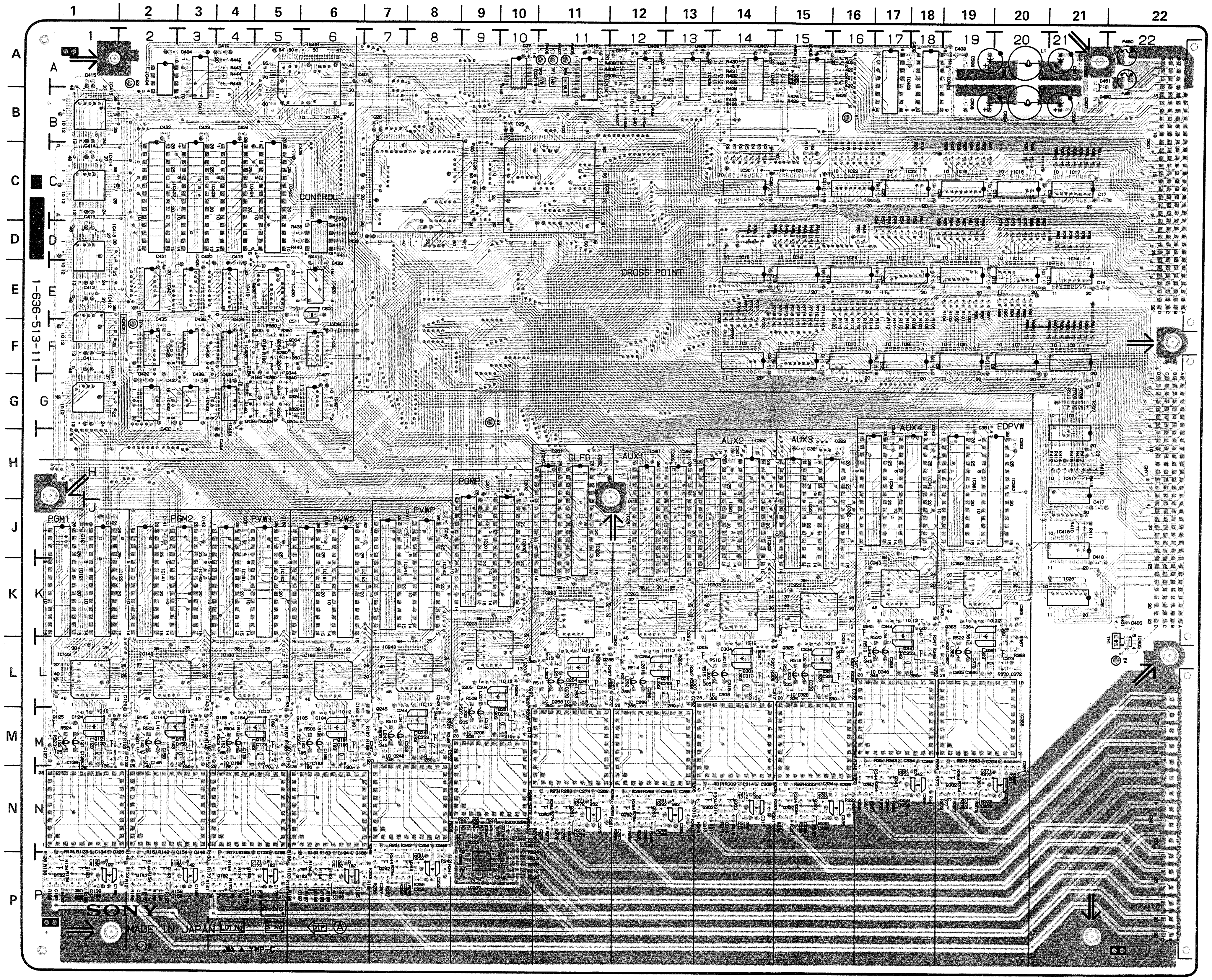
CNX1	B-22
CNY1	H-22
CNZ1	N-22
D450	A-21
D451	B-21
E1	B-16
E2	A-2
E3	G-9
E4	L-22
E5	P-2
F450	A-22
F451	B-22
IC1	F-15
IC2	F-14
IC3	G-21
IC6	F-21
IC7	F-20
IC8	F-19
IC9	F-17
IC10	F-16
IC11	D-17
IC12	D-19
IC13	D-20
IC14	D-21
IC15	C-19
IC16	C-20
IC17	C-21
IC18	D-14
IC19	D-15
IC20	C-14
IC21	C-15
IC22	C-16
IC23	C-18
IC24	D-16
IC25	C-11
IC26	C-9
IC27	A-10
IC28	K-21
IC121	K-1
IC122	K-2
IC123	L-1
IC126	N-1
IC141	K-2
IC142	K-3
IC143	L-2
IC146	N-2
IC161	K-4
IC162	K-5
IC163	L-4
IC166	N-4
IC181	K-6
IC182	K-7
IC183	L-6
IC186	N-6
IC201	J-9
IC202	J-10
IC203	K-9
IC206	M-9
IC207	P-9
IC241	K-8
IC242	K-8
IC243	L-7
IC246	M-7
IC261	H-1
IC262	J-11
IC263	K-11
IC266	L-11
IC281	J-11
IC282	H-13
IC283	K-12
IC286	L-12
IC301	J-14
IC302	J-14
IC303	K-14
IC306	L-14
IC321	J-15
IC322	J-16
IC323	K-15
IC326	L-15
IC341	H-17
IC342	H-18
IC343	K-17
IC346	L-17
IC361	H-19
IC362	H-20
IC363	K-19
IC366	M-10
IC401	A-6
IC402	A-17
IC403	A-19
IC404	A-2
IC405	L-22
IC406	A-13
IC407	A-14
IC408	A-15
IC409	B-12
IC410	B-3
IC411	F-1
IC412	E-1
IC413	D-1
IC414	C-1
IC415	B-1
IC416	A-11
IC417	H-21
IC418	J-21
IC419	E-4
IC420	E-3
IC421	E-2
IC422	C-2
IC423	C-3
IC424	C-4
IC425	C-5
IC426	F-6
IC427	G-6
IC428	F-4
IC429	E-6
IC430	E-5
IC431	C-6
IC432	G-2
IC433	G-3
IC434	H-4
IC435	F-2
IC436	F-3
Q121	M-1
Q122	P-1
Q123	P-1
Q124	G-4
Q125	M-1
Q141	M-3
Q142	P-2
Q143	P-2
Q144	G-4
Q145	M-2
Q161	M-5
Q162	P-4
Q163	P-4
Q164	F-4
Q165	M-4
Q181	M-6
Q182	P-6
Q183	P-6
Q184	F-5
Q185	M-6
Q201	M-10
Q204	G-5
Q205	L-9
Q241	M-8
Q242	P-7
Q243	P-8
Q244	G-5
Q245	M-7
Q261	L-11
Q262	N-11
Q263	N-11
Q264	F-5
Q265	L-11
Q281	L-13
Q282	N-12
Q283	N-12
Q284	F-5
Q285	L-12
Q301	L-14
Q302	N-14
Q303	N-14
Q304	G-5
Q305	L-13
Q321	L-16
Q322	N-15
Q323	N-15
Q324	G-5
Q325	L-15
Q341	L-18
Q342	N-17
Q343	N-17
Q344	F-5
Q345	K-17
Q361	L-20
Q362	N-19
Q363	N-19
Q364	F-5
Q365	K-19
Q401	B-12
TH1	K-22
TP1	A-11
TP2	A-11
TP3	A-11
TP4	F-2

OUT-1: OUTPUT PROCESSOR BOARD

S/N: 10001 through 10030



OUT-1; OUTPUT PROCESSOR BOARD S/N; 10001 through 10030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K
L
M
N
P
CONTROL
CROSS POINT
1-636-513-11
PGM1
PGM2
PVW1
PVW2
PVWP
PGMP
CLFD
AUX1
AUX2
AUX3
AUX4
EDPVW
SONY
MADE IN JAPAN

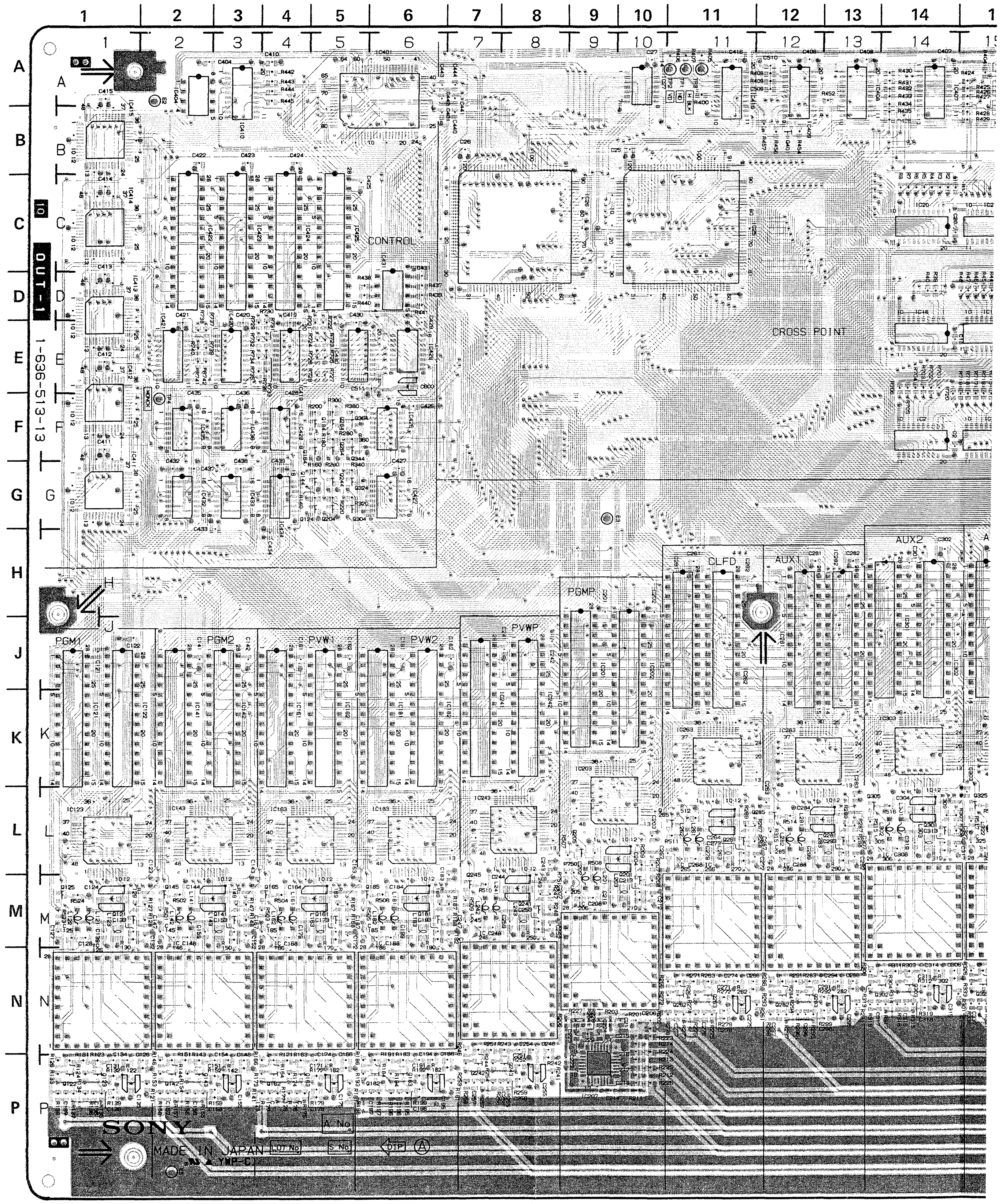
OUT-1 -A SIDE-
1-636-613-11
DVS-8000

DVS-8000

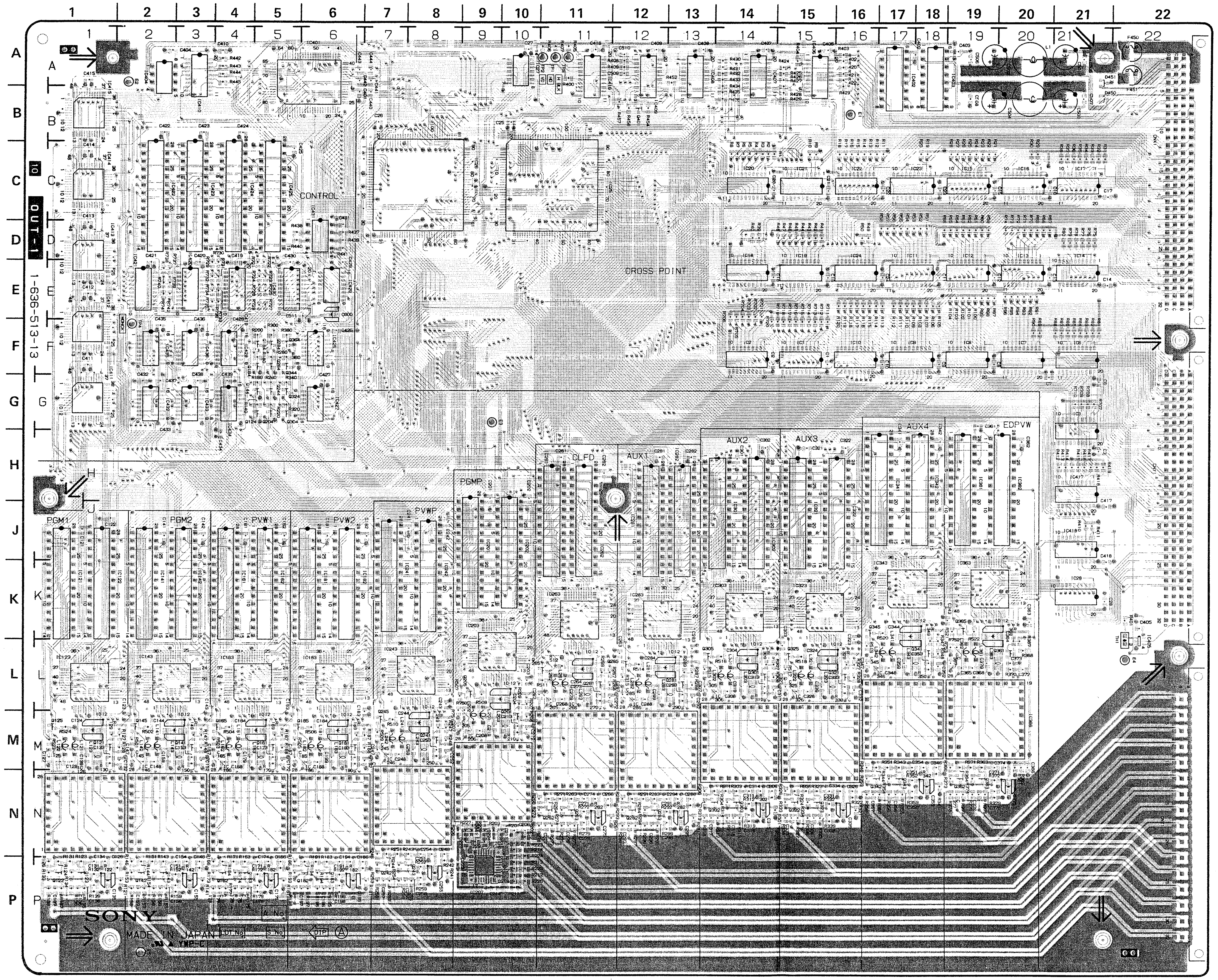
OUT-1 (1-636-513-12, 13)

CNX1	B-22
CNY1	H-22
CNZ1	N-22
D450	A-21
D451	B-21
E1	B-16
E2	A-2
E3	G-9
E4	L-22
E5	P-2
F450	A-22
F451	B-22
IC1	F-15
IC2	F-14
IC3	G-21
IC6	F-21
IC7	F-20
IC8	F-19
IC9	F-17
IC10	F-16
IC11	D-17
IC12	D-19
IC13	D-20
IC14	D-21
IC15	C-19
IC16	C-20
IC17	C-21
IC18	D-14
IC19	D-15
IC20	C-14
IC21	C-15
IC22	C-16
IC23	C-18
IC24	D-16
IC25	C-11
IC26	C-9
IC27	A-10
IC28	K-21
IC121	K-1
IC122	K-2
IC123	L-1
IC126	N-1
IC141	K-2
IC142	K-3
IC143	L-2
IC146	N-2
IC161	K-4
IC162	K-5
IC163	L-4
IC166	N-4
IC181	K-6
IC182	K-7
IC183	L-6
IC186	N-6
IC201	J-9
IC202	J-10
IC203	K-9
IC206	M-9
IC207	P-9
IC241	K-8
IC242	K-8
IC243	L-7
IC246	M-7
IC261	H-1
IC262	J-11
IC263	K-11
IC266	L-11
IC281	J-11
IC282	H-13
IC283	K-12
IC286	L-12
IC301	J-14
IC302	J-14
IC303	K-14
IC306	L-14
IC321	J-15
IC322	J-16
IC323	K-15
IC326	L-15
IC341	H-17
IC342	H-18
IC343	K-17
IC346	L-17
IC361	H-19
IC362	H-20
IC363	K-19
IC366	M-10
IC401	A-6
IC402	A-17
IC403	A-19
IC404	A-2
IC405	L-22
IC406	A-13
IC407	A-14
IC408	A-15
IC409	B-12
IC410	B-3
IC411	F-1
IC412	E-1
IC413	D-1
IC414	C-1
IC415	B-1
IC416	A-11
IC417	H-21
IC418	J-21
IC419	E-4
IC420	E-3
IC421	E-2
IC422	C-2
IC423	C-3
IC424	C-4
IC425	C-5
IC426	F-6
IC427	G-6
IC428	F-4
IC429	E-6
IC430	E-5
IC431	C-6
IC432	G-2
IC433	G-3
IC434	H-4
IC435	F-2
IC436	F-3
Q121	M-1
Q122	P-1
Q123	P-1
Q124	G-4
Q125	M-1
Q141	M-3
Q142	P-2
Q143	P-2
Q144	G-4
Q145	M-2
Q161	M-5
Q162	P-4
Q163	P-4
Q164	F-4
Q165	M-4
Q181	M-6
Q182	P-6
Q183	P-6
Q184	F-5
Q185	M-6
Q201	M-10
Q204	G-5
Q205	L-9
Q241	M-8
Q242	P-7
Q243	P-8
Q244	G-5
Q245	M-7
Q261	L-11
Q262	N-11
Q263	N-11
Q264	F-5
Q265	L-11
Q281	L-13
Q282	N-12
Q283	N-12
Q284	F-5
Q285	L-12
Q301	L-14
Q302	N-14
Q303	N-14
Q304	G-5
Q305	L-13
Q321	L-16
Q322	N-15
Q323	N-15
Q324	G-5
Q325	L-15
Q341	L-18
Q342	N-17
Q343	N-17
Q344	F-5
Q345	K-17
Q361	L-20
Q362	N-19
Q363	N-19
Q364	F-5
Q365	K-19
Q401	B-12
TH1	K-22
TP1	A-11
TP2	A-11
TP3	A-11
TP4	F-2

OUT-1; OUTPUT PROCESSOR BOARD S/N: 10031 and higher



OUT-1: OUTPUT PROCESSOR BOARD S/N: 10031 and higher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N
P
OUT-1
1-636-513-13
CONTROL
CROSS POINT
PGM1
PGM2
PVW1
PVW2
PVWP
PGMP
CLFD
AUX1
AUX2
AUX3
AUX4
EDPVW
SONY
MADE IN JAPAN

OUT-1 -A SIDE-
1-636-513-12, 13
DVS-8000

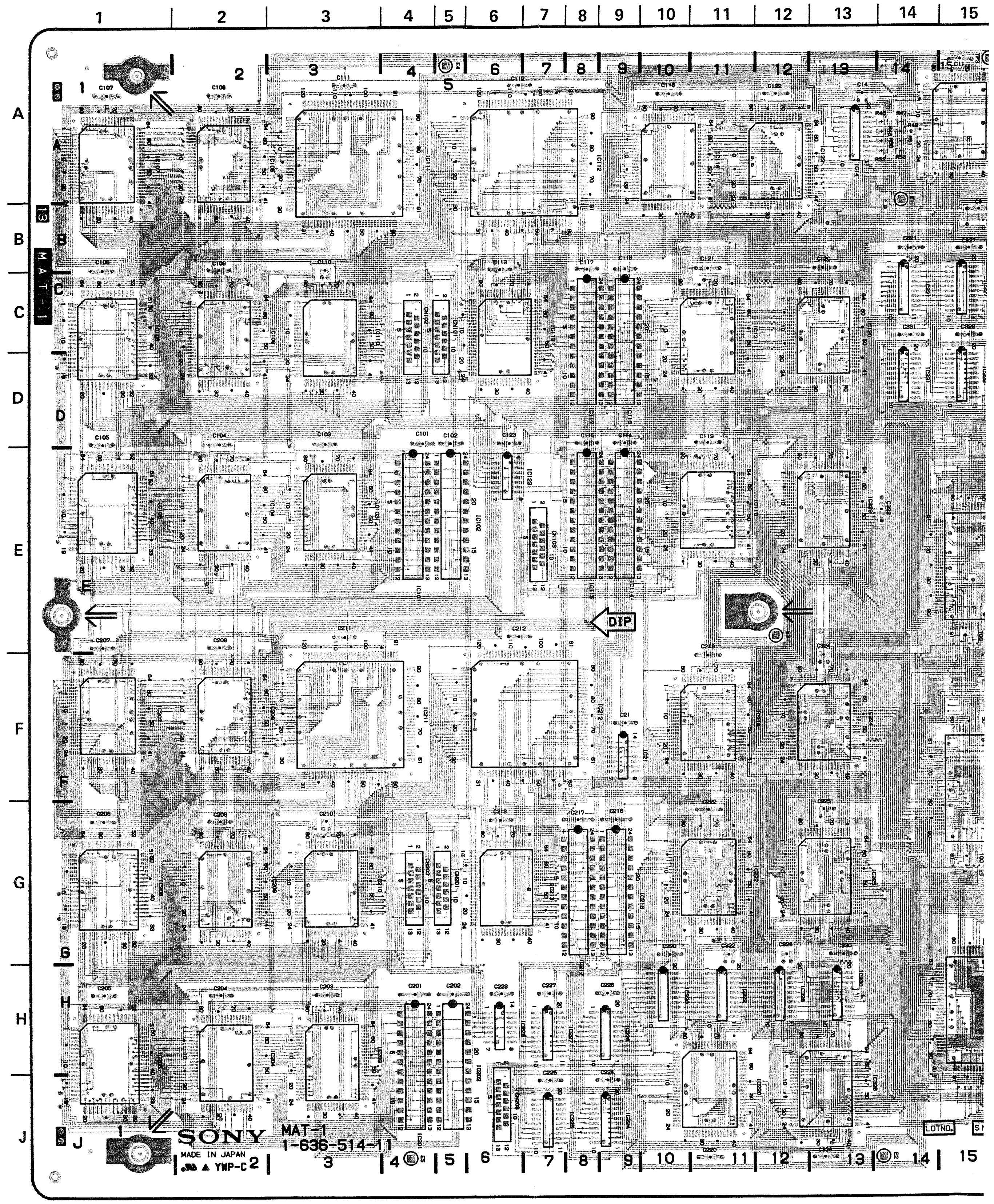
DVS-8000

MAT-1 (1-636-514-11)

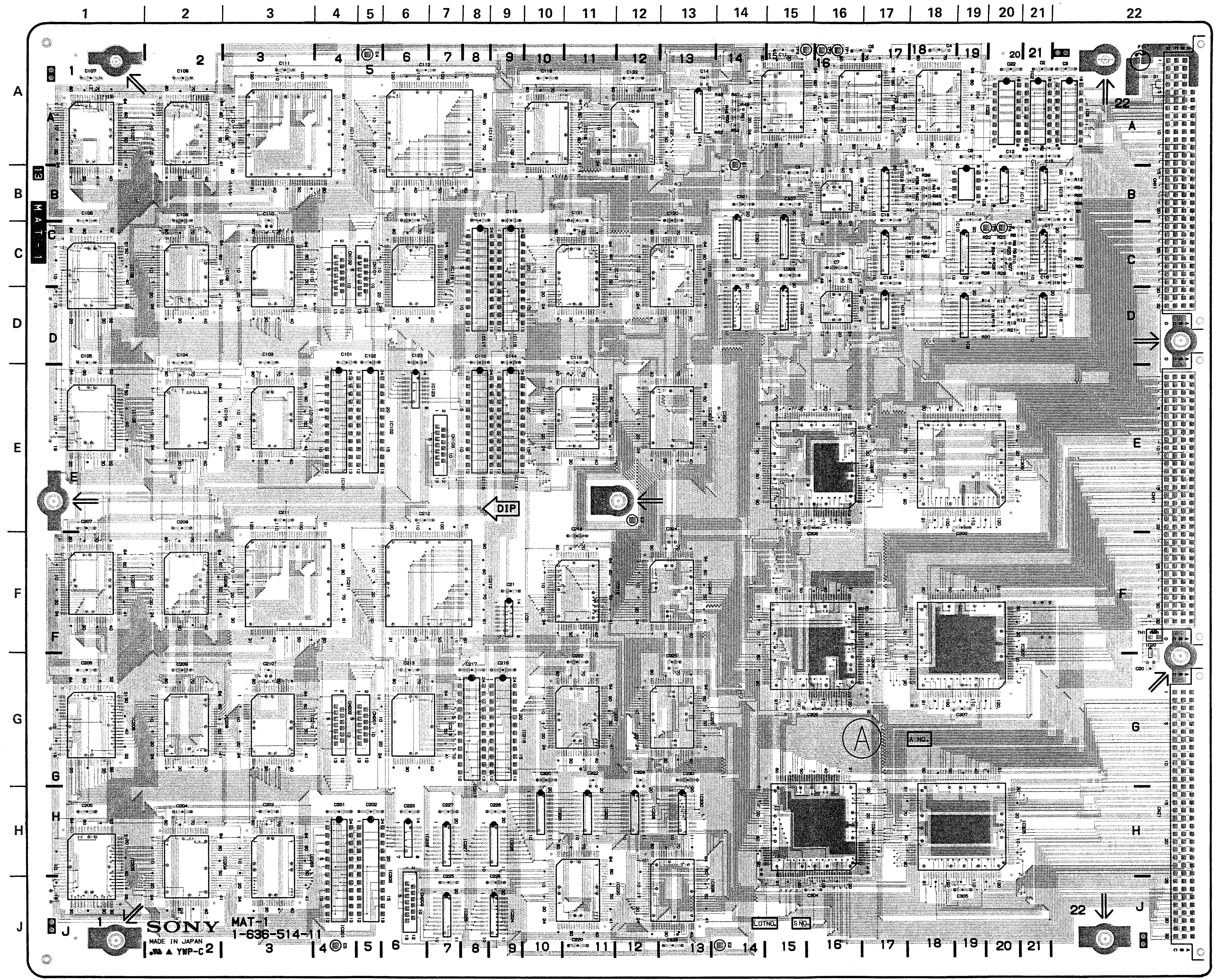
CNX1	B-22
CNY1	E-22
CNZ1	H-22
CN101	C-5
CN102	C-4
CN103	E-7
CN201	G-5
CN202	G-4
CN203	J-6
D1	J-22
E1	B-14
E2	J-14
E3	E-12
E4	A-5
E5	J-4
F1	A-22
IC2	A-21
IC3	A-22
IC4	A-19
IC5	A-17
IC6	B-19
IC7	D-17
IC8	B-17
IC9	D-19
IC10	C-19
IC11	A-16
IC12	B-21
IC13	B-17
IC14	A-13
IC15	B-22
IC16	D-22
IC17	C-22
IC18	C-17
IC19	D-17
IC20	G-22
IC21	F-9
IC22	A-19
IC101	E-4
IC102	E-6
IC103	E-3
IC104	E-3
IC105	E-1
IC106	C-1
IC107	A-1
IC108	A-3
IC109	C-3
IC110	C-3
IC111	A-4
IC112	A-8
IC113	C-7
IC114	E-9
IC115	E-8
IC116	D-9
IC117	D-8
IC118	A-11
IC119	E-11
IC120	C-13
IC121	C-11
IC122	A-13
IC123	E-7
IC201	J-4
IC202	J-5
IC203	H-3
IC204	H-2
IC205	H-1
IC206	G-1
IC207	F-1
IC208	F-2
IC209	G-2
IC210	G-3
IC211	F-4
IC212	F-8
IC213	G-7
IC216	G-9
IC217	H-8
IC218	F-11
IC220	J-11
IC222	G-11
IC223	H-6
IC224	J-9
IC225	J-7
IC226	H-9
IC227	H-7
IC304	H-17
IC305	H-20
IC306	G-17
IC307	G-20
IC308	E-17
IC309	E-20
IC320	H-10
IC321	C-14
IC322	H-11
IC323	E-13
IC324	F-13
IC325	G-13
IC326	J-13
IC327	C-15
IC328	H-12
IC329	C-15
IC330	H-13
IC331	D-14
TH1	F-22
TP1	A-16
TP2	A-16
TP3	A-15
TP4	C-20
TP5	C-20

MAT-1; MATTE GENERATOR BOARD

S/N; 10001 through 10030



MAT-1; MATTE GENERATOR BOARD S/N; 10001 through 10030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J
DIP
A
A-NO.
LOT NO.
S NO.
SONY
MADE IN JAPAN
YMP-C
MAT-1
1-636-514-11

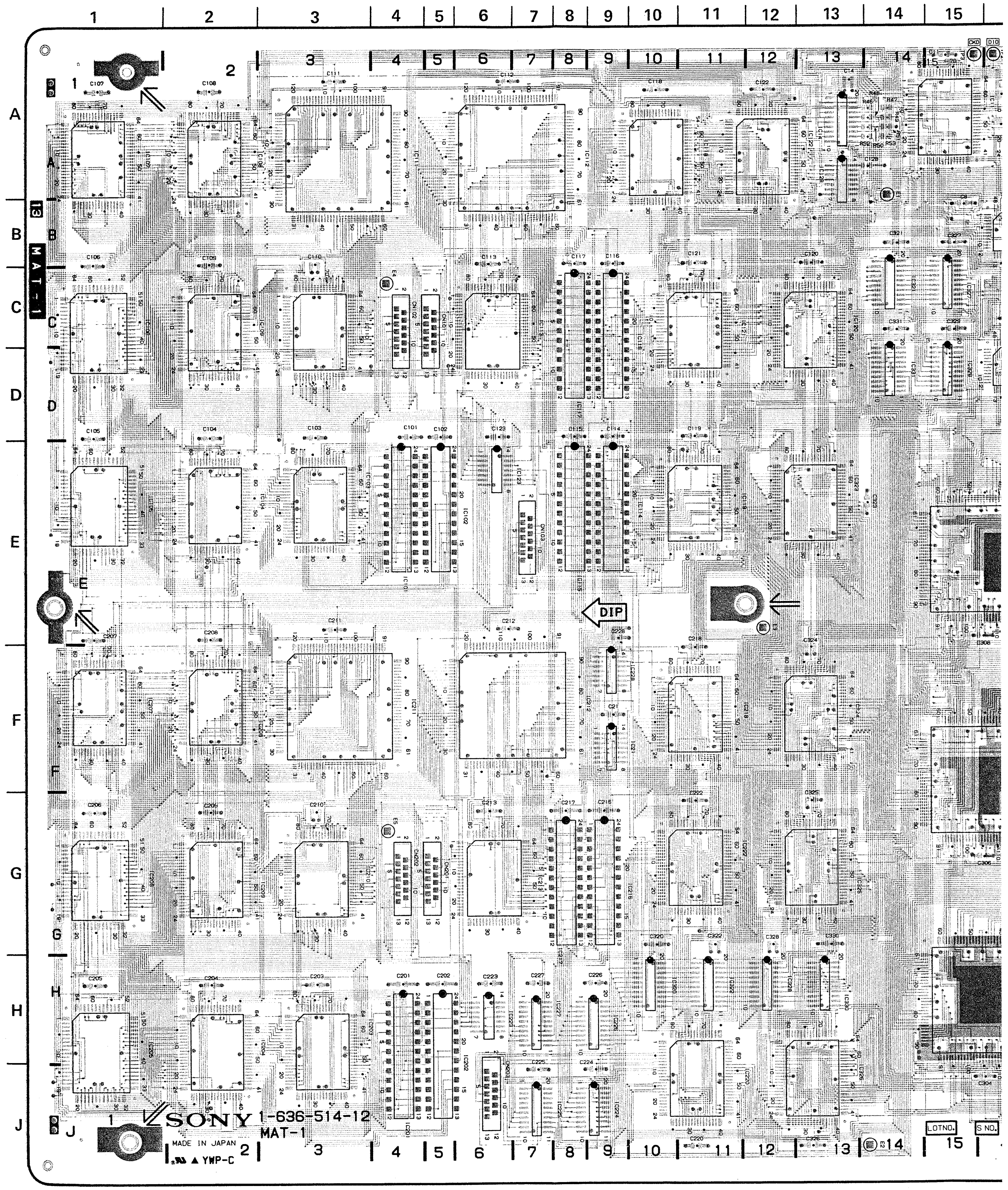
MAT-1 -A SIDE-
1-636-514-11
DVS-8000

DVS-8000

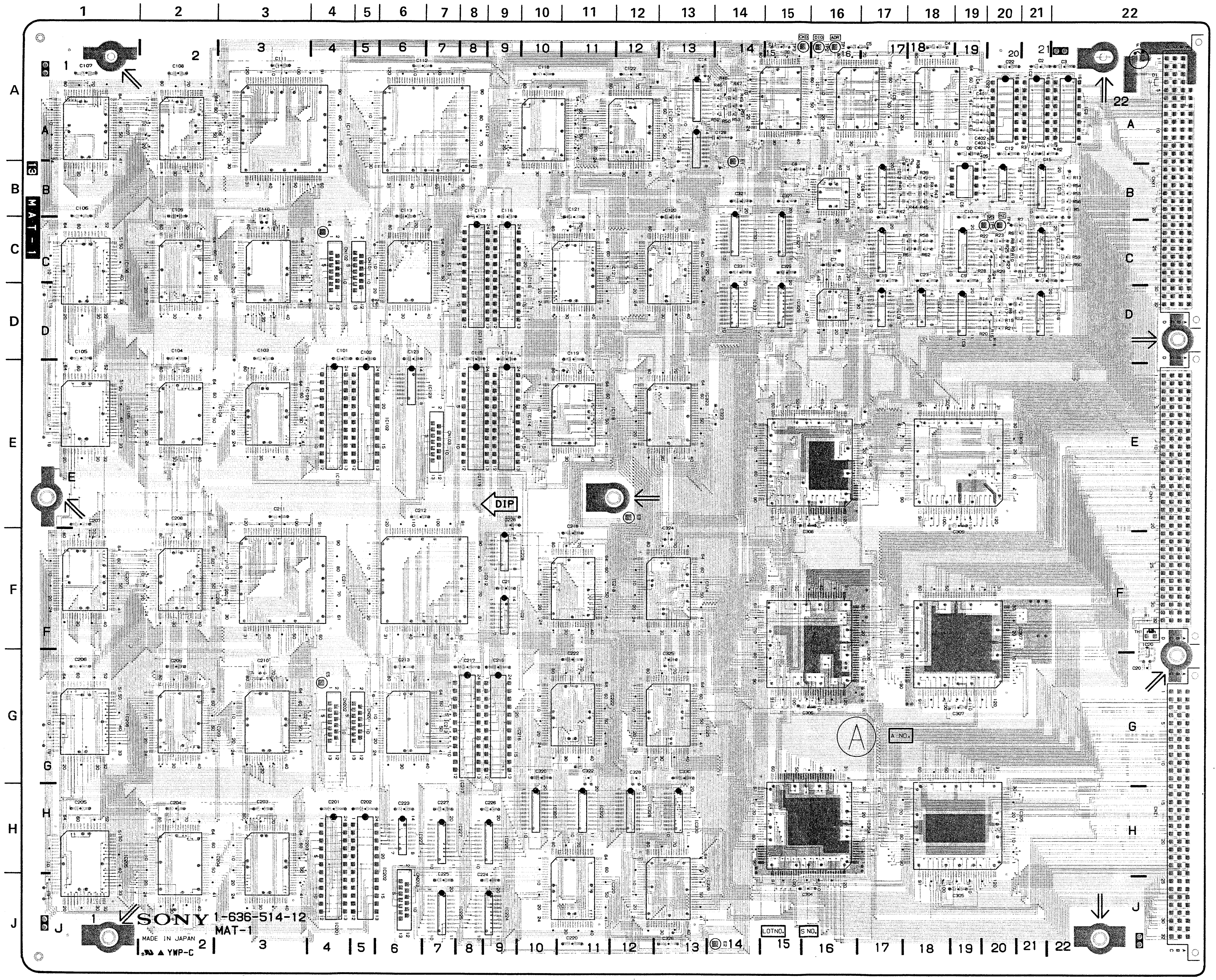
MAT-1 (1-636-514-12)

CNX1	B-22
CNY1	E-22
CNZ1	H-22
CN101	C-5
CN102	C-4
CN103	E-7
CN201	G-5
CN202	G-4
CN203	J-6
D1	A-22
E1	B-14
E2	J-14
E3	E-12
E4	C-4
E5	G-4
F1	A-22
IC2	A-21
IC3	A-22
IC4	A-19
IC5	A-17
IC6	B-19
IC7	D-17
IC8	B-17
IC9	D-19
IC10	C-18
IC11	A-16
IC12	B-21
IC13	B-17
IC14	A-13
IC15	B-22
IC16	D-22
IC17	C-22
IC18	C-17
IC19	D-17
IC20	F-22
IC21	F-10
IC22	A-19
IC23	D-18
IC101	E-4
IC102	E-6
IC103	E-3
IC104	E-3
IC105	E-1
IC106	C-1
IC107	A-1
IC108	A-3
IC109	C-3
IC110	C-3
IC111	A-4
IC112	A-8
IC113	C-7
IC114	E-10
IC115	E-8
IC116	D-10
IC117	D-8
IC118	A-11
IC119	E-11
IC120	C-13
IC121	C-11
IC122	A-13
IC123	E-7
IC128	A-13
IC201	J-4
IC202	J-6
IC203	H-3
IC204	H-3
IC205	H-1
IC206	G-1
IC207	F-1
IC208	F-3
IC209	G-3
IC210	G-3
IC211	F-4
IC212	F-8
IC213	G-7
IC216	G-9
IC217	H-8
IC218	F-11
IC220	J-11
IC222	G-11
IC223	H-6
IC224	J-9
IC225	J-8
IC226	H-9
IC227	H-8
IC228	F-10
IC304	H-17
IC305	H-21
IC306	G-17
IC307	F-21
IC308	E-17
IC309	E-20
IC320	H-10
IC321	C-14
IC322	H-11
IC323	E-13
IC324	F-13
IC325	G-13
IC326	J-13
IC327	C-15
IC328	H-12
IC329	D-15
IC330	H-13
IC331	D-14
TH1	F-22
TP1	A-16
TP2	A-16
TP3	A-15
TP4	C-20
TP5	C-20

MAT-1; MATTE GENERATOR BOARD S/N; 10031 and higher



MAT-1; MATTE GENERATOR BOARD S/N; 10031 and higher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F
G
H
J
MAT-1
DIP
A
A-NO.
LOTNO.
S NO.
SONY
1-636-514-12
MAT-1
MADE IN JAPAN
YWP-C

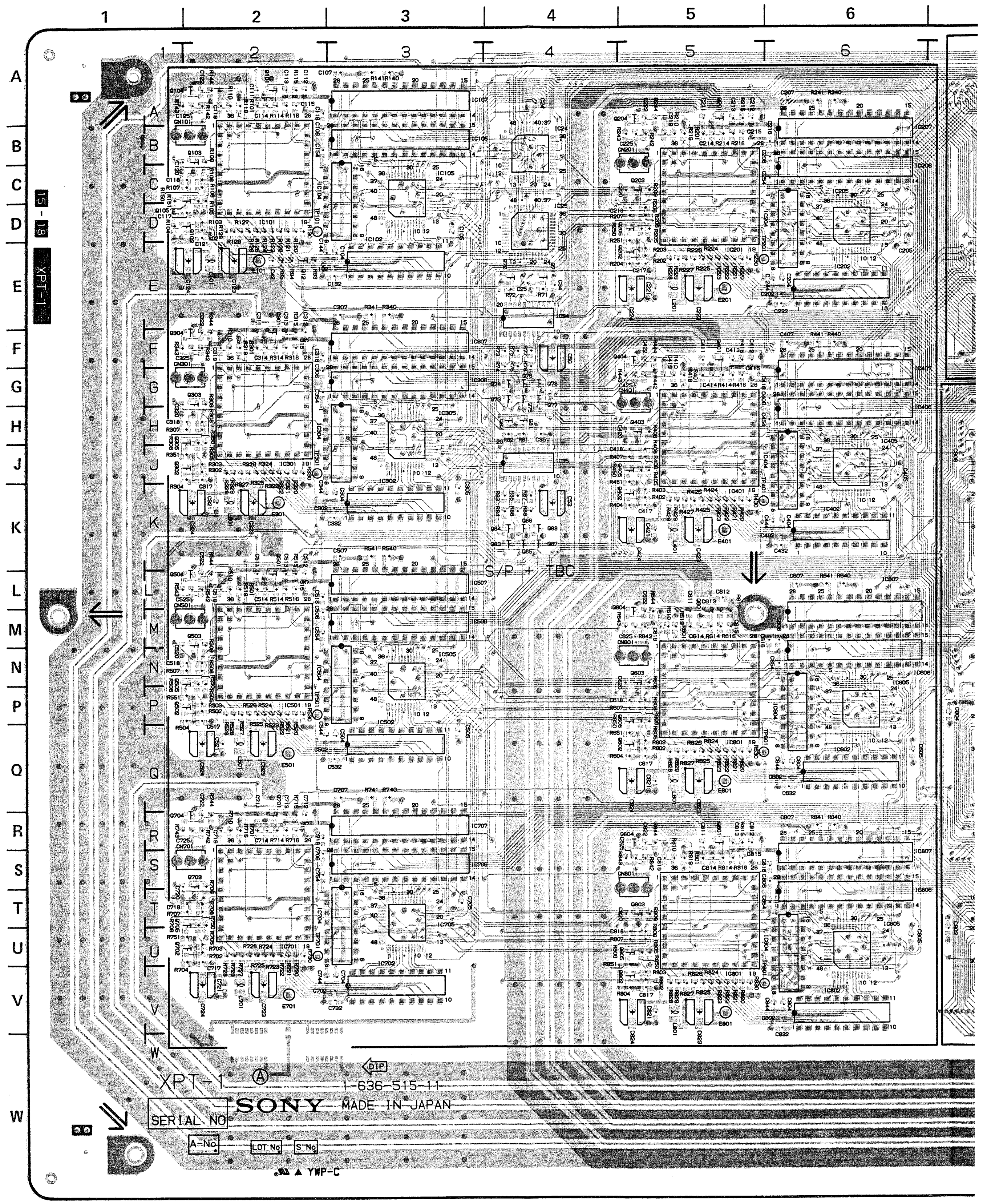
MAT-1 -A SIDE-
1-636-514-12
DVS-8000

DVS-8000

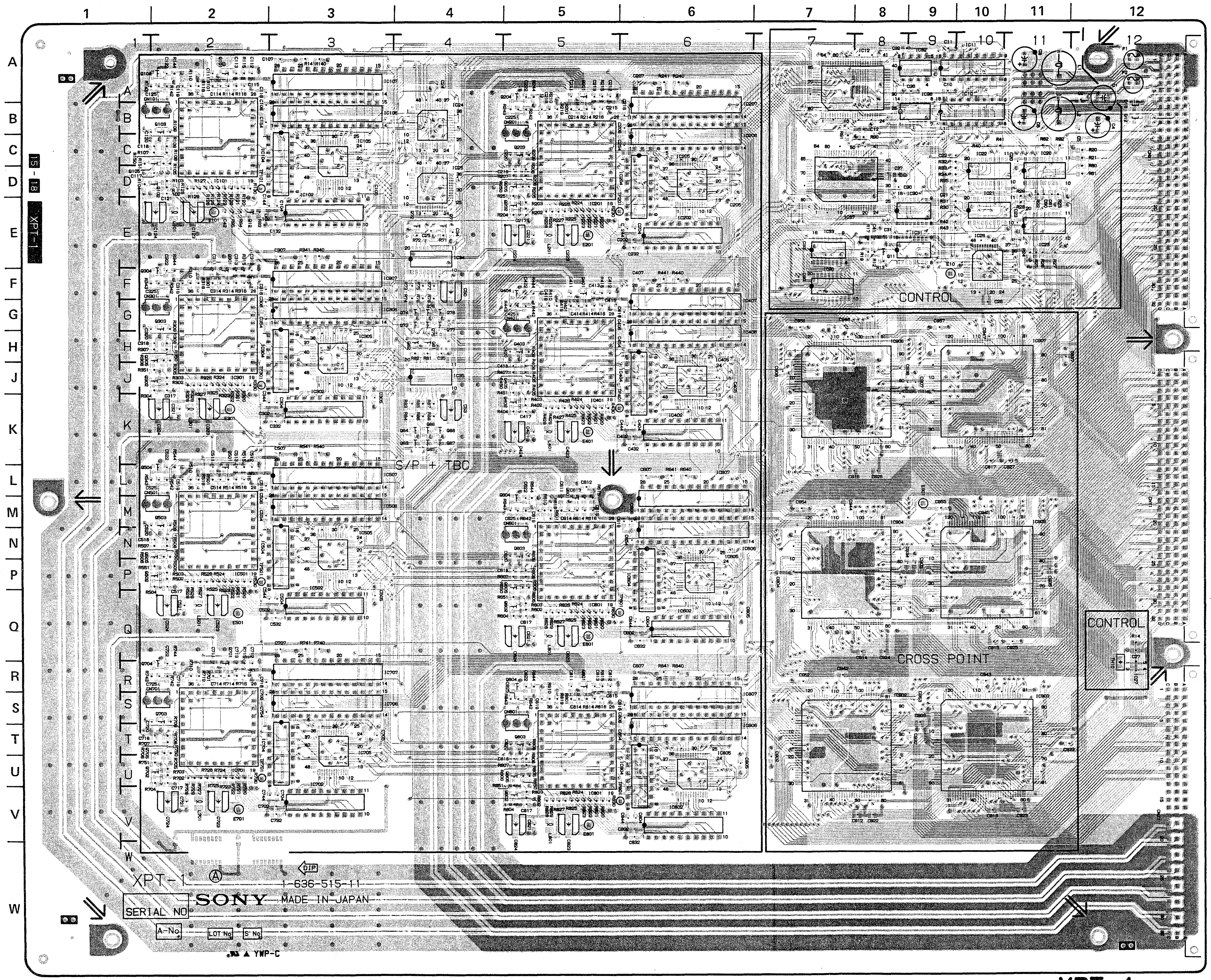
XPT-1 (1-636-515-11)

CNX1	C-12
CNY1	M-12
CNZ1	V-12
CN101	A-2
CN201	B-5
CN301	F-2
CN401	G-5
CN501	L-2
CN601	M-5
CN701	R-2
CN801	S-5
D12	B-12
D13	B-12
E10	F-9
E101	E-2
E201	E-5
E301	K-2
E401	K-5
E501	Q-2
E601	Q-5
E701	V-2
E801	V-5
E901	M-9
F1	A-12
F2	A-12
IC10	A-10
IC11	A-10
IC12	A-8
IC20	C-11
IC21	D-10
IC22	C-10
IC23	E-11
IC24	B-4
IC25	D-4
IC26	E-10
IC27	R-12
IC30	D-9
IC31	E-9
IC32	A-9
IC33	E-7
IC34	E-4
IC35	J-4
IC36	A-9
IC37	E-7
IC90	F-7
IC101	D-2
IC102	E-3
IC104	C-2
IC105	C-3
IC106	B-3
IC107	A-3
IC201	E-5
IC202	E-6
IC204	D-6
IC205	C-6
IC206	C-6
IC207	B-6
IC301	J-2
IC302	K-3
IC304	H-4
IC305	H-3
IC306	G-3
IC307	F-3
IC401	K-5
IC402	K-6
IC404	J-6
IC405	J-6
IC406	H-6
IC407	G-6
IC501	P-2
IC502	Q-3
IC504	N-2
IC505	N-3
IC506	M-3
IC507	L-3
IC601	Q-5
IC602	Q-6
IC604	P-6
IC605	P-6
IC606	N-6
IC607	L-6
IC701	U-2
IC702	V-3
IC704	T-2
IC705	T-3
IC706	S-3
IC707	R-3
IC801	V-5
IC802	V-6
IC804	U-6
IC805	U-6
IC806	T-6
IC807	S-6
IC902	S-8
IC903	S-11
IC904	M-8
IC905	M-11
IC906	H-8
IC907	H-11
Q11	E-8
Q12	E-2
Q71	E-4
Q72	E-4
Q73	G-4
Q74	G-4
Q75	H-4
Q76	G-4
Q77	G-4
Q78	G-4
Q81	H-4
Q82	H-4
Q83	K-4
Q84	K-4
Q85	K-4
Q86	K-4
Q87	K-4
Q88	K-4
Q101	A-2
Q102	D-1
Q103	B-2
Q104	A-1
Q105	D-1
Q201	A-5
Q202	E-5
Q203	C-5
Q204	A-5
Q205	D-5
Q301	E-2
Q302	J-1
Q303	G-2
Q304	F-1
Q305	H-1
Q401	F-5
Q402	K-5
Q403	H-5
Q404	F-5
Q405	J-5
Q501	K-2
Q502	P-1
Q503	M-2
Q504	L-1
Q505	N-1
Q601	L-5
Q602	Q-5
Q603	N-5
Q604	L-5
Q605	P-5
Q701	Q-2
Q702	U-1
Q703	S-2
Q704	R-1
Q705	T-1
Q801	R-5
Q802	V-5
Q803	T-5
Q804	R-5
Q805	U-5
TH10	R-12
TP101	D-2
TP201	E-5
TP301	E-5
TP401	J-2
TP501	P-2
TP601	Q-5
TP701	U-2
TP801	V-5

XPT-1: DIGITAL INPUT BOARD S/N: 10001 through 10030



XPT-1: DIGITAL INPUT BOARD S/N: 10001 through 10030


1
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12
A
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C
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F
G
H
J
K
L
M
N
P
Q
R
S
T
U
V
W
15-18
XPT-1
S/P + TBC
CONTROL
CROSS POINT
CONTROL
XPT-1
DIP
1-636-515-11
SONY
MADE IN JAPAN
SERIAL NO
A-No
LOT No
S No
YWP-C

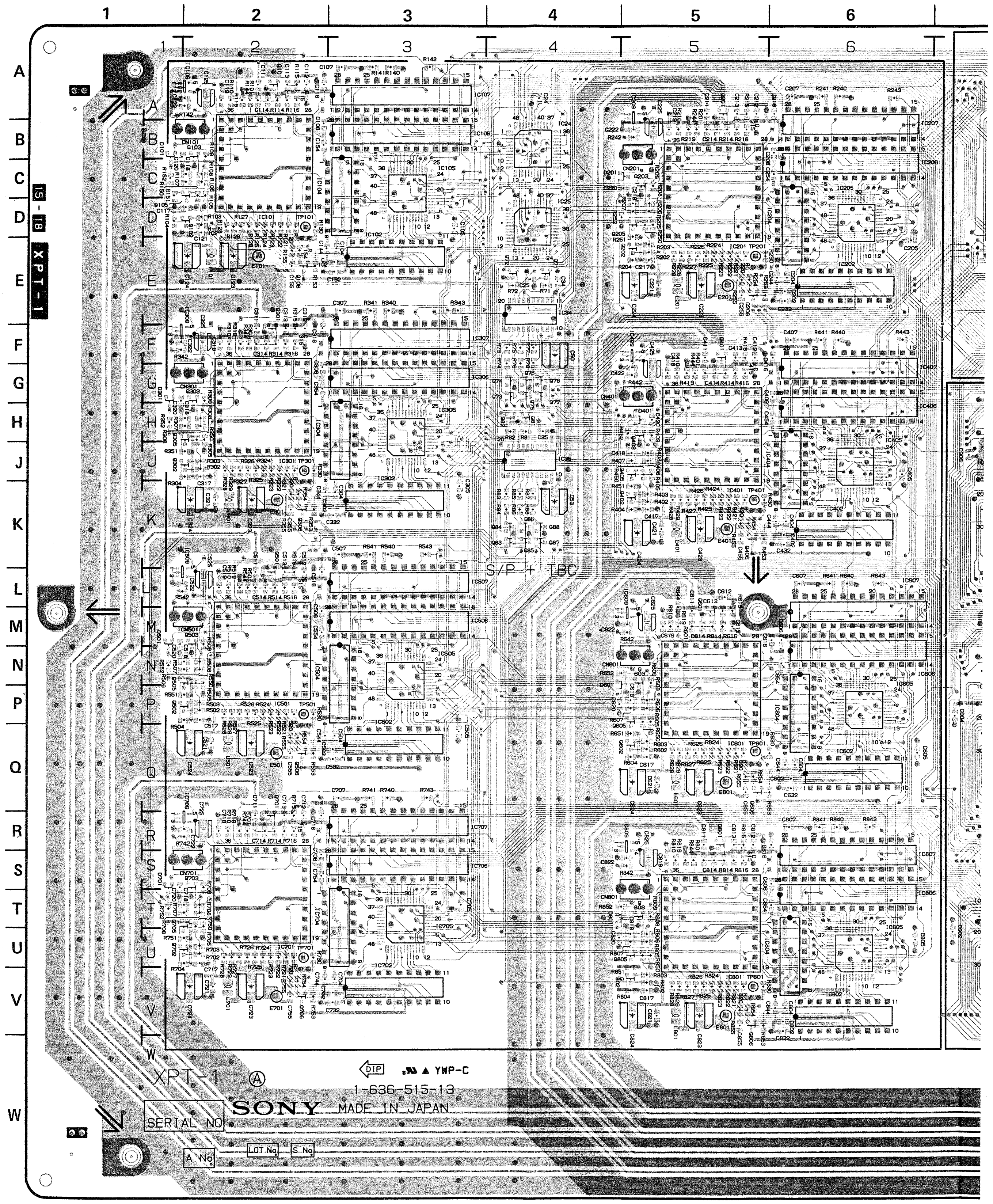
XPT-1 -A SIDE-
1-636-515-11
DVS-8000

DVS-8000

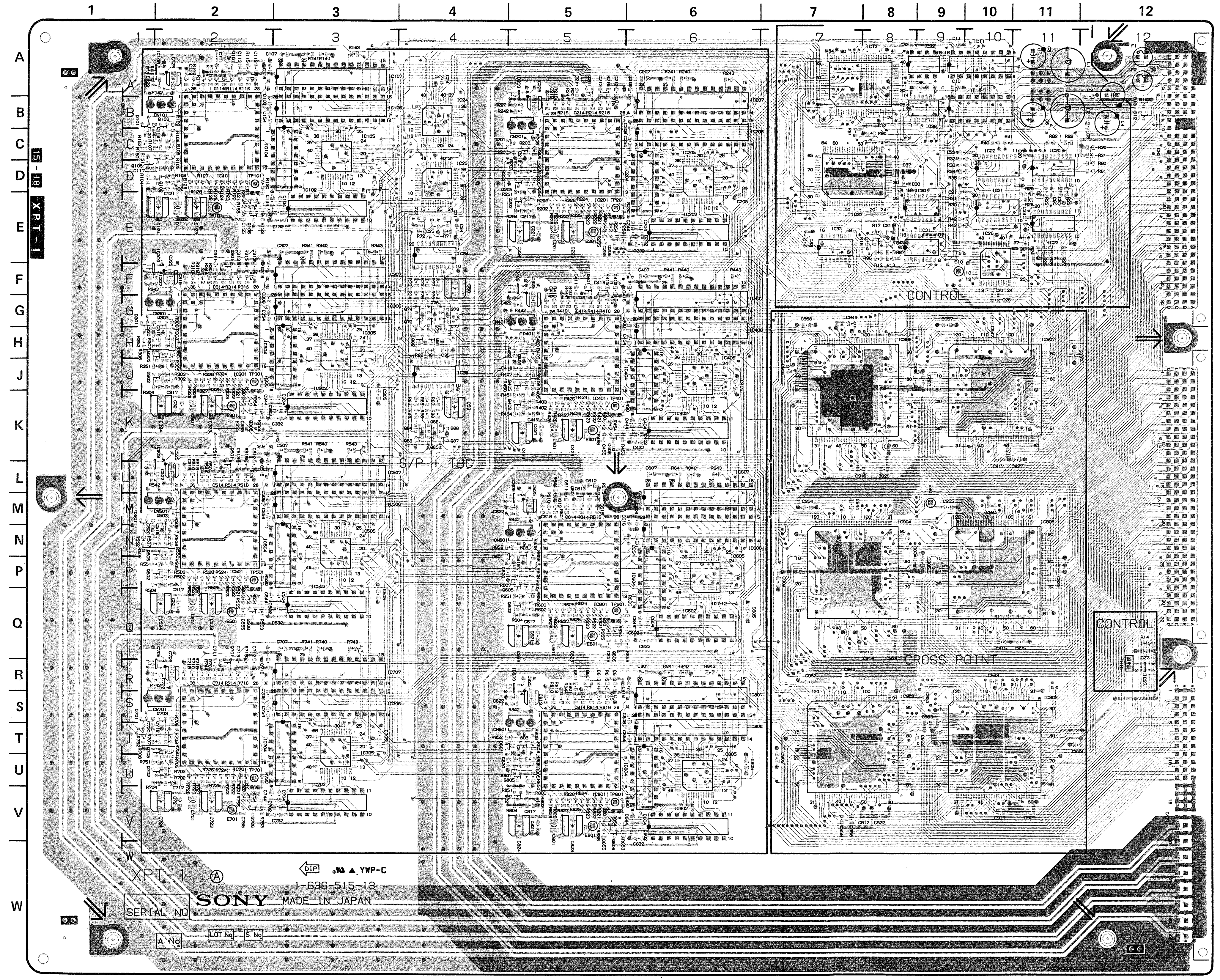
XPT-1 (1-636-515-12, 13)

CNX1	C-12
CNY1	M-12
CNZ1	V-12
CN101	B-1
CN201	C-5
CN301	G-2
CN401	H-5
CN501	M-1
CN601	N-4
CN701	S-1
CN801	T-4
D12	B-12
D13	B-12
D101	B-1
D201	C-4
D301	G-1
D401	H-5
D501	M-1
D601	D-4
D701	S-1
D801	T-4
E10	F-9
E101	E-2
E201	E-5
E301	K-2
E401	K-5
E501	Q-2
E601	Q-5
E701	V-2
E801	V-5
E901	M-9
F1	A-12
F2	A-12
IC10	A-10
IC11	A-10
IC12	A-8
IC20	C-11
IC21	D-10
IC22	C-10
IC23	E-11
IC24	B-4
IC25	D-4
IC26	E-10
IC27	R-12
IC30	D-9
IC31	E-9
IC32	A-9
IC33	E-7
IC34	E-4
IC35	J-4
IC36	B-9
IC37	E-7
IC101	D-2
IC102	D-3
IC104	C-2
IC105	C-3
IC106	B-3
IC107	A-3
IC109	A-2
IC201	E-5
IC202	E-6
IC204	D-6
IC205	C-6
IC206	C-6
IC207	B-6
IC209	A-5
IC301	J-2
IC302	J-3
IC304	H-2
IC305	H-3
IC306	G-3
IC307	F-3
IC309	E-2
IC401	K-5
IC402	K-6
IC404	J-6
IC405	J-6
IC406	H-6
IC407	G-6
IC409	F-5
IC501	P-2
IC502	P-3
IC504	N-2
IC505	N-3
IC506	M-3
IC507	L-3
IC509	K-2
IC601	Q-5
IC602	Q-6
IC604	P-6
IC605	P-6
IC606	N-6
IC607	L-6
IC609	L-5
IC701	U-2
IC702	U-3
IC704	T-2
IC705	T-3
IC706	S-3
IC707	R-3
IC709	Q-2
IC801	V-5
IC802	V-6
IC804	U-6
IC805	U-6
IC806	T-6
IC807	S-6
IC809	R-5
IC902	S-8
IC903	S-11
IC904	M-8
IC905	M-11
IC906	H-8
IC907	H-11
Q11	E-8
Q71	E-4
Q72	E-4
Q73	G-4
Q74	G-4
Q75	H-4
Q76	G-4
Q77	G-4
Q78	G-4
Q81	H-4
Q82	H-4
Q83	K-4
Q84	K-4
Q85	K-4
Q86	K-4
Q87	K-4
Q88	K-4
Q101	A-2
Q102	D-2
Q103	B-2
Q105	D-1
Q106	E-2
Q201	A-5
Q202	E-5
Q203	C-5
Q205	D-5
Q206	E-5
Q301	E-2
Q302	J-1
Q303	G-2
Q305	H-1
Q306	K-2
Q401	F-5
Q402	K-5
Q403	H-5
Q405	J-5
Q406	K-5
Q501	K-2
Q502	P-1
Q503	M-2
Q505	N-1
Q506	Q-2
Q601	L-5
Q602	Q-5
Q603	N-5
Q605	P-5
Q606	Q-5
Q701	Q-2
Q702	U-1
Q703	S-2
Q705	T-1
Q706	V-2
Q801	R-5
Q802	V-5
Q803	T-5
Q805	U-5
Q806	W-5
TH10	R-12
TP101	D-2
TP201	E-5
TP301	J-2
TP401	K-5
TP501	P-2
TP601	Q-5
TP701	U-2
TP801	V-5

XPT-1; DIGITAL INPUT BOARD S/N; 10031 and higher



XPT-1; DIGITAL INPUT BOARD S/N; 10031 and higher


1
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11
12
A
B
C
D
E
F
G
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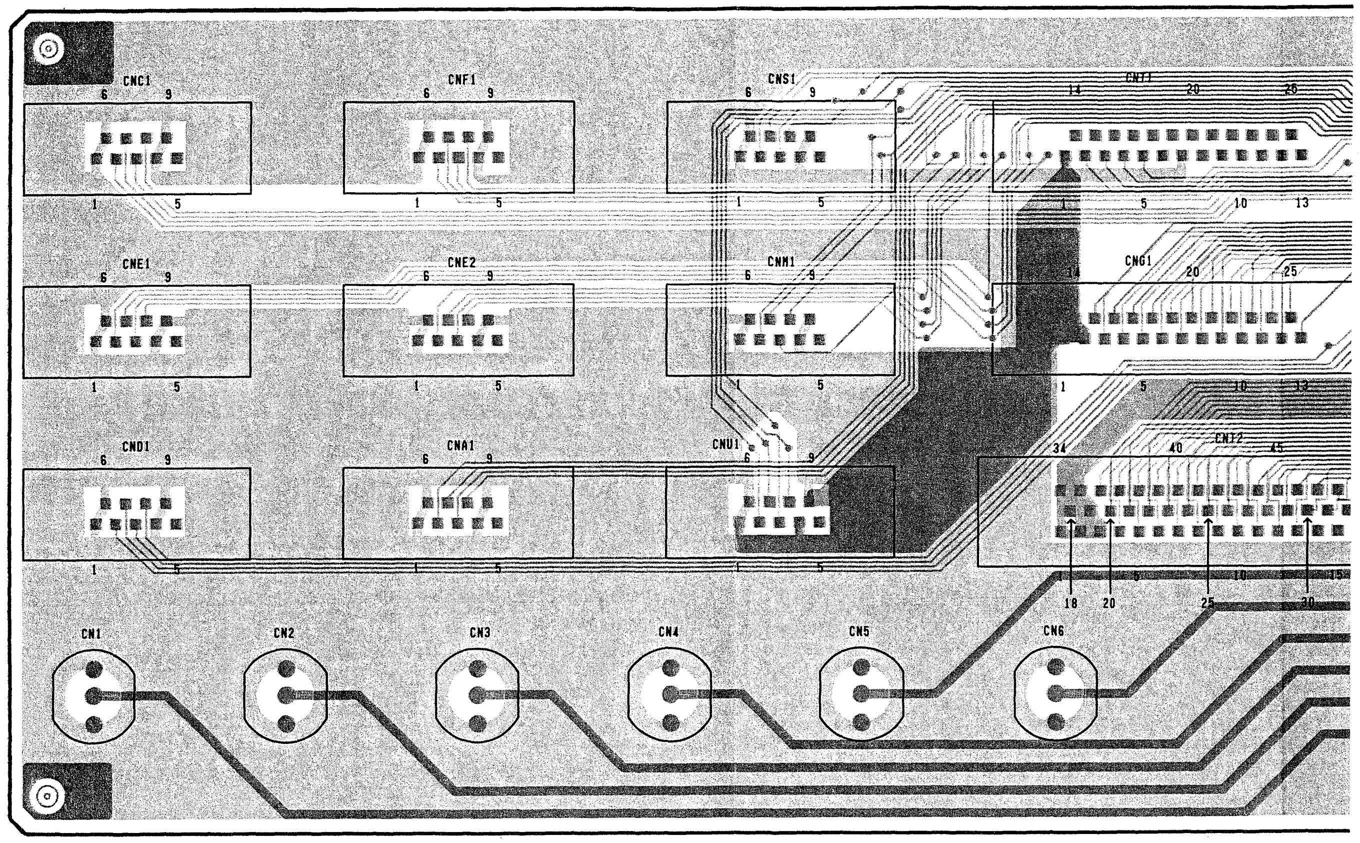
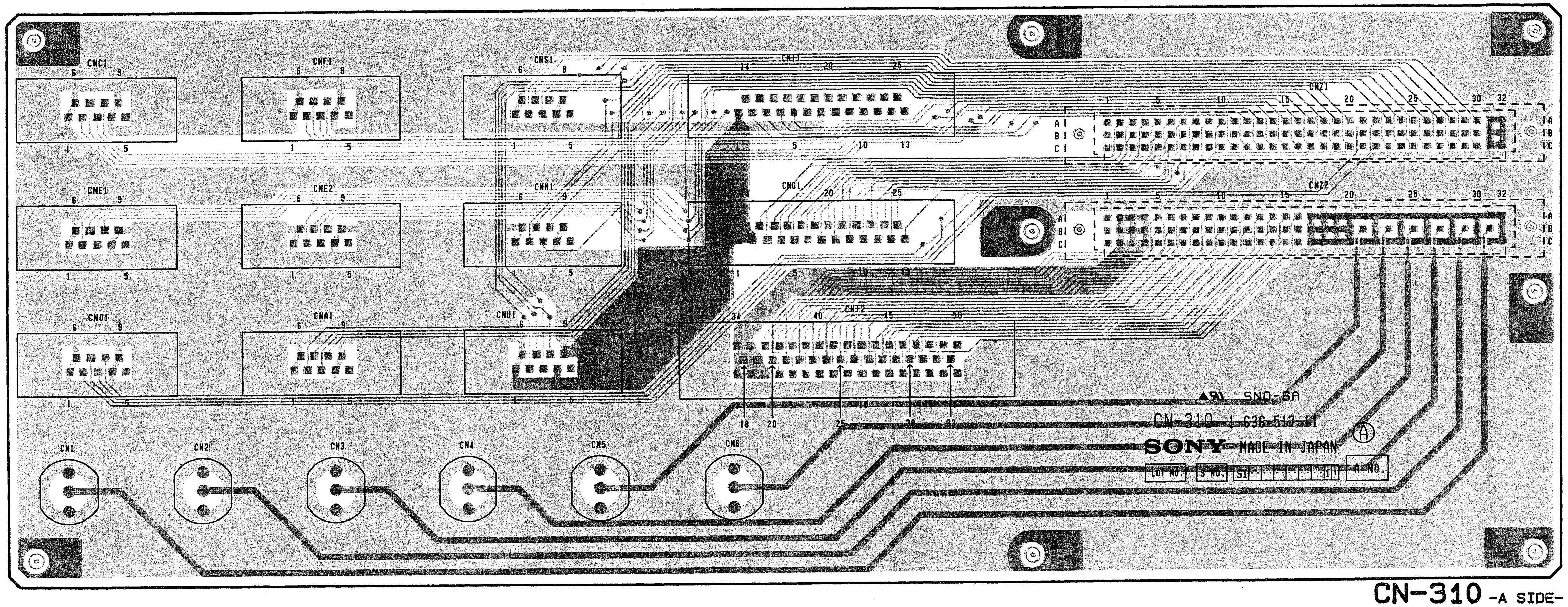
J
K
L
M
N
P
Q
R
S
T
U
V
W
15 - 18
XPT-1
CONTROL
S/P + TBC
CROSS POINT
CONTROL
XPT-1 Ⓐ
1-636-515-13
SONY
MADE IN JAPAN
SERIAL NO
A No
LOT No
S No

XPT-1 -A SIDE-
1-636-515-12, 13
DVS-8000

CN-310; CONTROL CONNECTOR BOARD

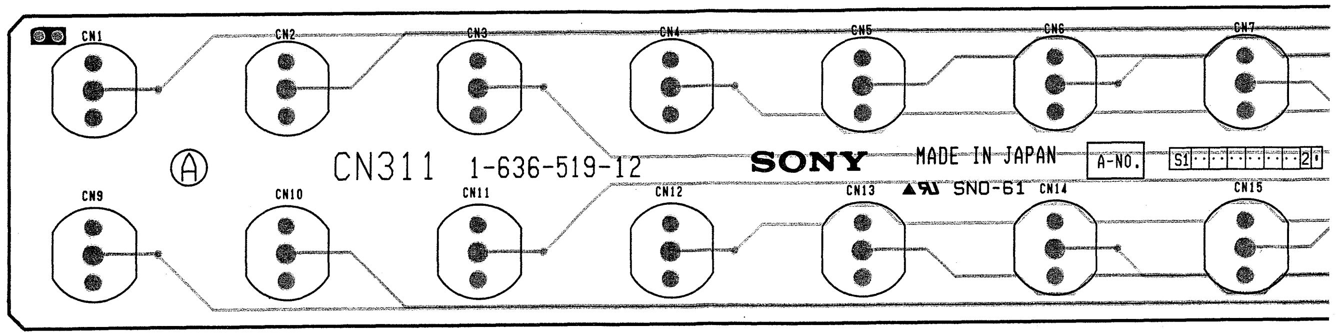

CNC1
CNF1
CNS1
CNT1
CNE1
CNE2
CNM1
CNG1
CND1
CNA1
CNU1
CNT2
CN1
CN2
CN3
CN4
CN5
CN6
18
20
25
30

CN-310: CONTROL CONNECTOR BOARD

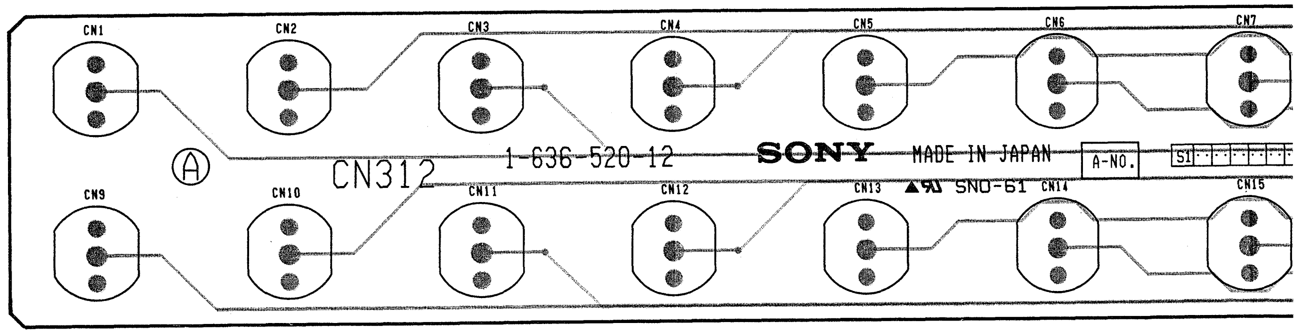

CNC1
CNF1
CNS1
CNT1
CNZ1
CNE1
CNE2
CNM1
CNG1
CNZ2
CND1
CNA1
CNU1
CNJ2
CN1
CN2
CN3
CN4
CN5
CN6
SNO-6A
CN-310 1-636-517-11
SONY MADE IN JAPAN
LOT NO.
S NO.
A NO.

CN-310 -A SIDE-
1-636-517-11
DVS-8000

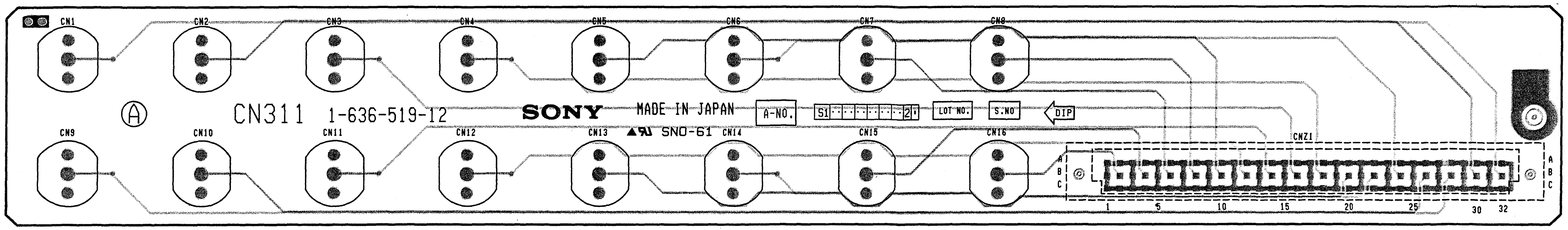
CN-311; OUTPUT CONNECTOR BOARD


CN1
CN2
CN3
CN4
CN5
CN6
CN7
Ⓐ
CN311
1-636-519-12
SONY
MADE IN JAPAN
A-NO.
S1
2
SNO-61
CN9
CN10
CN11
CN12
CN13
CN14
CN15

CN-312 (A), (B); PRIMARY INPUT CONNECTOR BOARDS

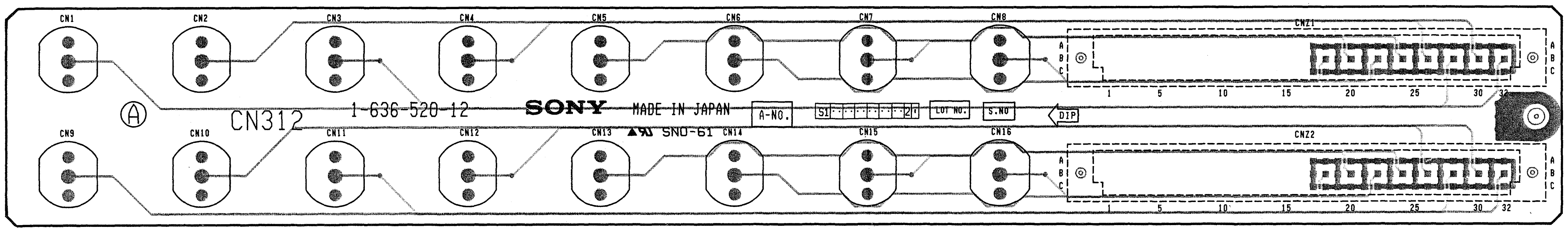

CN1
CN2
CN3
CN4
CN5
CN6
CN7
Ⓐ
CN312
1-636-520-12
SONY
MADE IN JAPAN
A-NO.
S1
SNO-61
CN9
CN10
CN11
CN12
CN13
CN14
CN15

CN-311: OUTPUT CONNECTOR BOARD


CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN8
CN9
CN10
CN11
CN12
CN13
CN14
CN15
CN16
Ⓐ
CN311
1-636-519-12
SONY
MADE IN JAPAN
A-NO.
S1
2
LOT NO.
S.NO
DIP
SNO-61
CN21
A
B
C
1
5
10
15
20
25
30
32

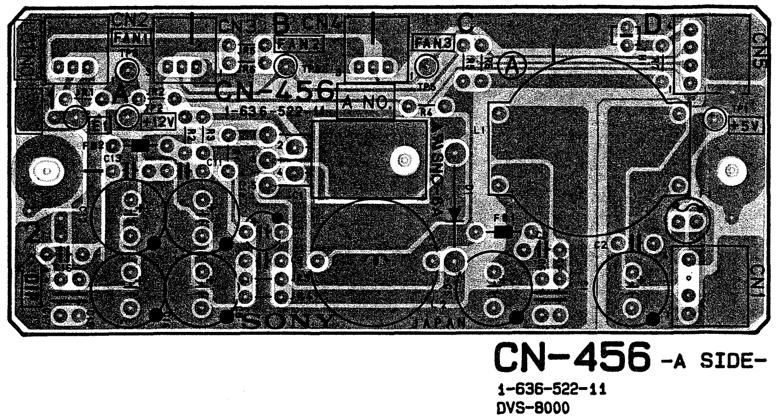
CN-311 -A SIDE-
1-636-519-11, 12
DVS-8000

CN-312 (A), (B); PRIMARY INPUT CONNECTOR BOARDS

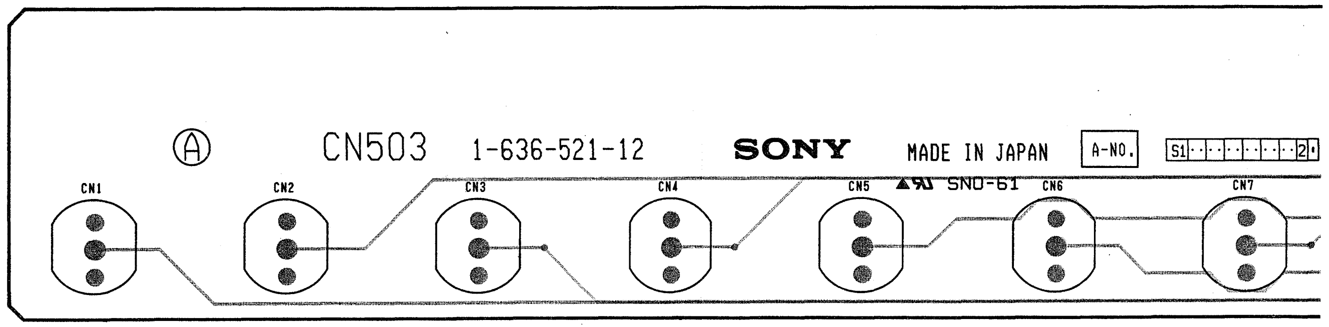

CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN8
CN9
CN10
CN11
CN12
CN13
CN14
CN15
CN16
Ⓐ
CN312
1-636-520-12
SONY
MADE IN JAPAN
A-NO.
S1
2
LOT NO.
S.NO
DIP
SNO-61
CN21
CN22
A
B
C
1
5
10
15
20
25
30
32

CN-312 -A SIDE-
1-636-520-11, 12
DVS-8000

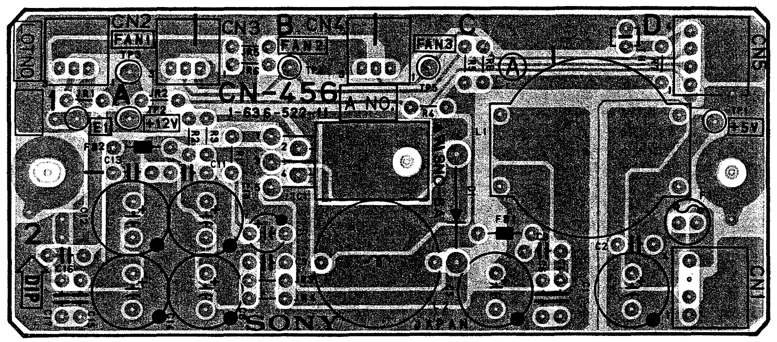
CN-456: POWER SUPPLY CONNECTOR BOARD


CN2
FAN1
CN3
B
CN4
FAN2
FAN3
C
D
CN5
CN-456
1-636-522-11
A-NO.
+12V
+5V
CN1
SONY
CN-456 -A SIDE-
1-636-522-11
DVS-8000

CN-503: CHROMA KEY INPUT CONNECTOR BOARD

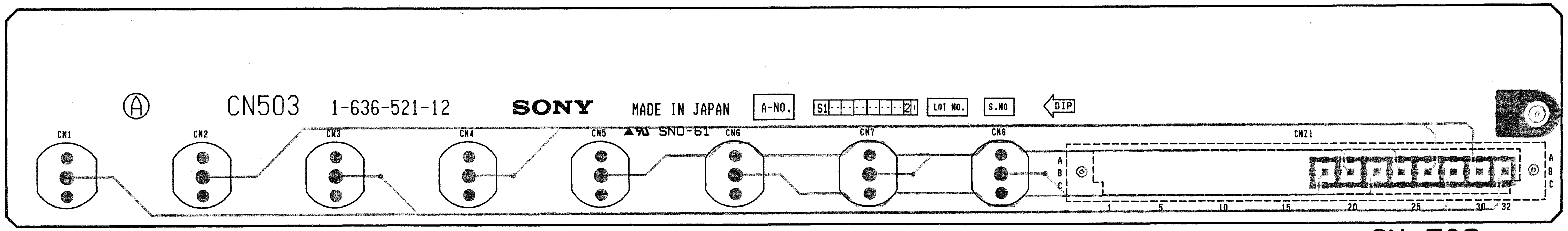

Ⓐ
CN503 1-636-521-12
SONY
MADE IN JAPAN
A-NO.
SNO-61
CN1
CN2
CN3
CN4
CN5
CN6
CN7

CN-456; POWER SUPPLY CONNECTOR BOARD


CN2
FAN1
CN3
B
CN4
FAN2
C
D
CN5
CN10
CN-456
1-636-522-11
A-NO.
A
+12V
+5V
E1
2
DIP
SONY
CN1

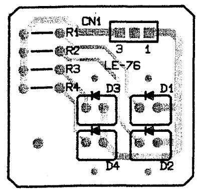
CN-456 -A SIDE-
1-636-522-11
DVS-8000

CN-503; CHROMA KEY INPUT CONNECTOR BOARD

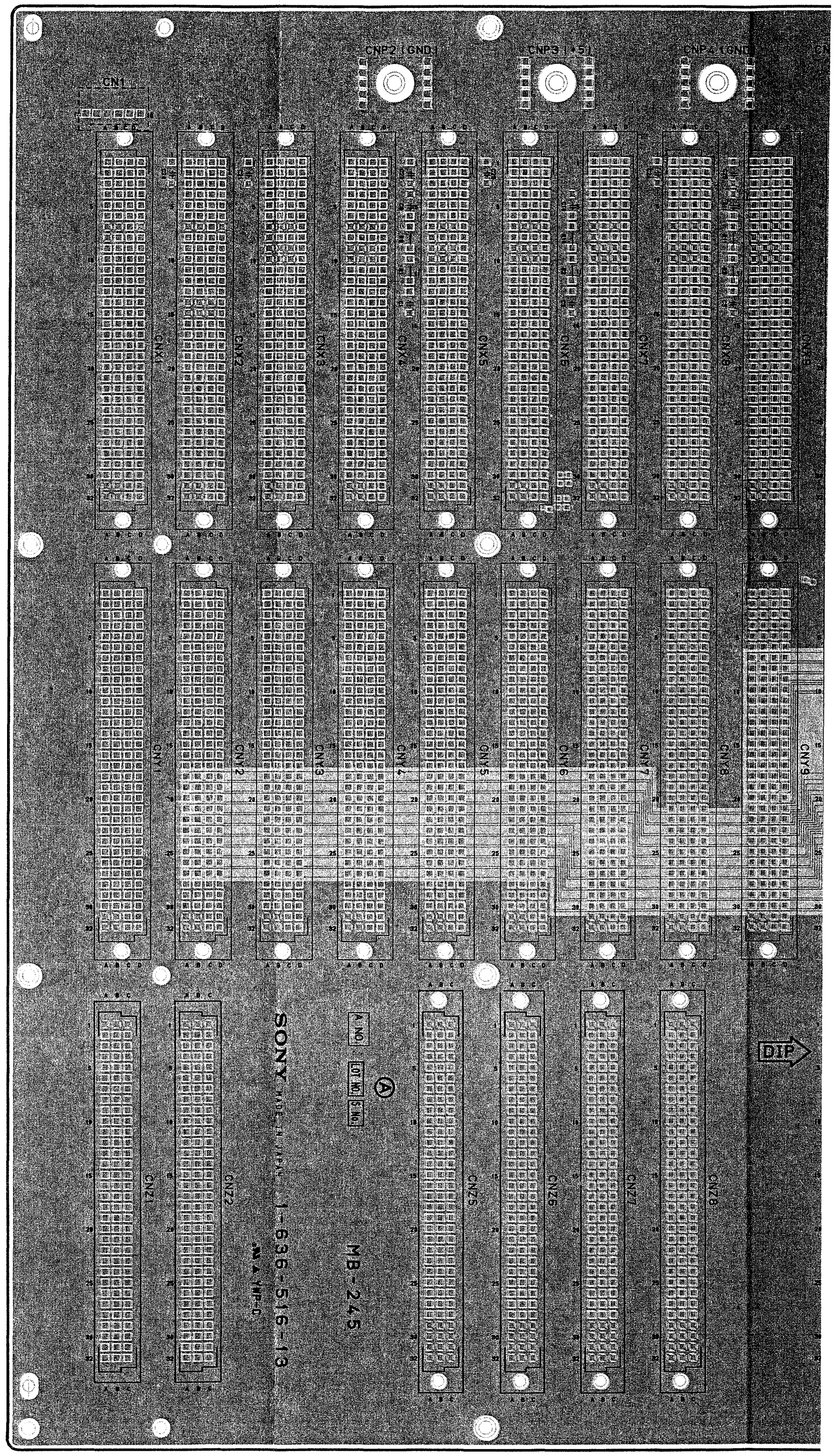

Ⓐ
CN503
1-636-521-12
SONY
MADE IN JAPAN
A-NO.
S1
2
LOT NO.
S.NO
DIP
SNU-61
CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN8
CNZ1
A
B
C
1
5
10
15
20
25
30
32

CN-503 -A SIDE-
1-636-521-11, 12
DVS-8000

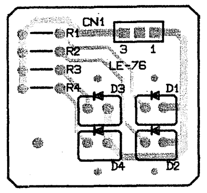
MB-245; MOTHER BOARD
LE-76; POWER LED BOARD


CN1
R1
R2
R3
R4
3
1
LE-76
D3
D1
D4
D2

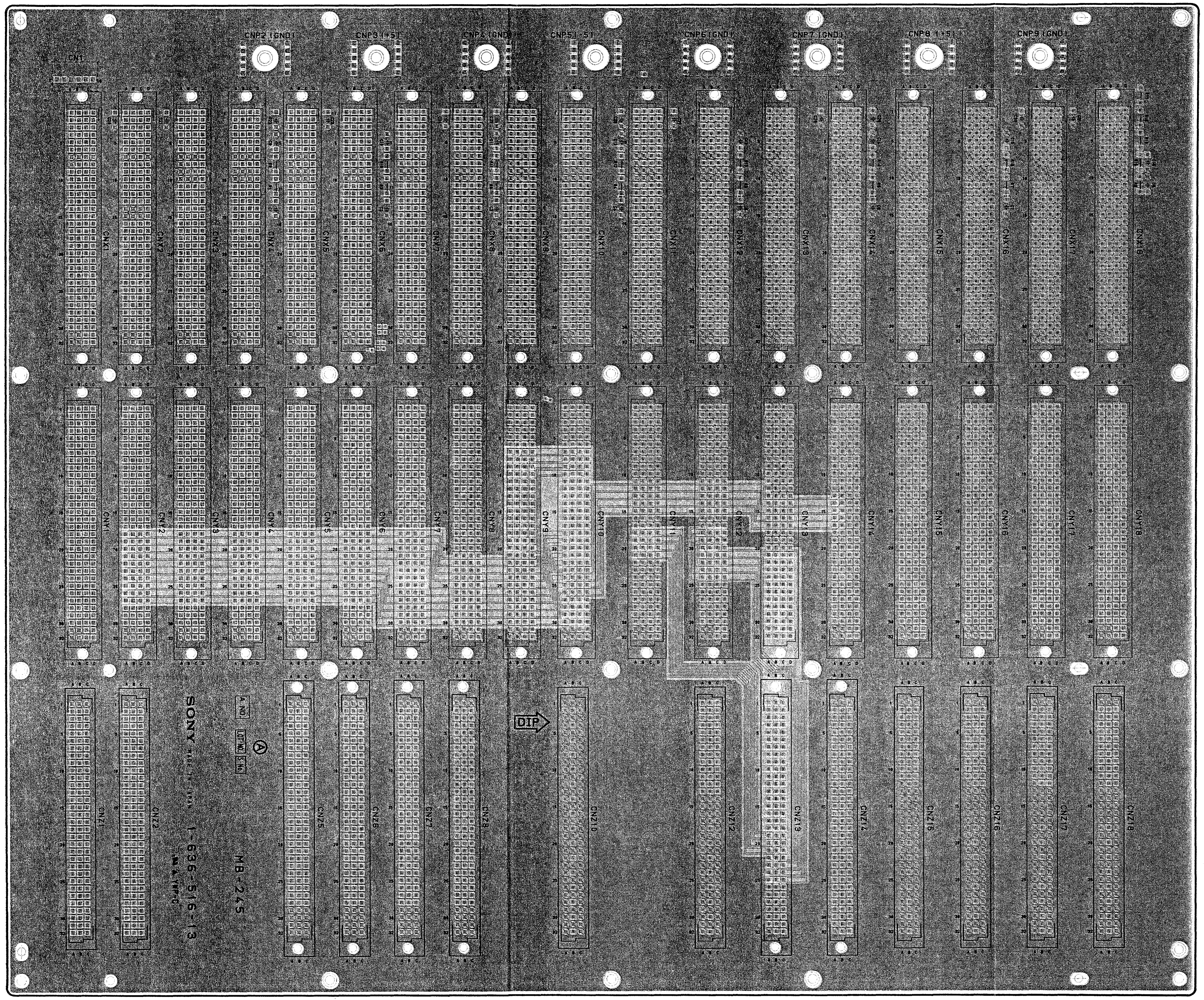
LE-76
-COMPONENT SIDE-
1-631-489-11
DVS-8000


CN1
CNP2 (GND)
CNP3 (+5)
CNP4 (GND)
CNX1
CNX2
CNX3
CNX4
CNX5
CNX6
CNX7
CNX8
CNX9
CNY1
CNY2
CNY3
CNY4
CNY5
CNY6
CNY7
CNY8
CNY9
CNZ1
CNZ2
CNZ5
CNZ6
CNZ7
CNZ8
SONY
MB-245
1-636-516-13
DIP

MB-245: MOTHER BOARD
LE-76: POWER LED BOARD

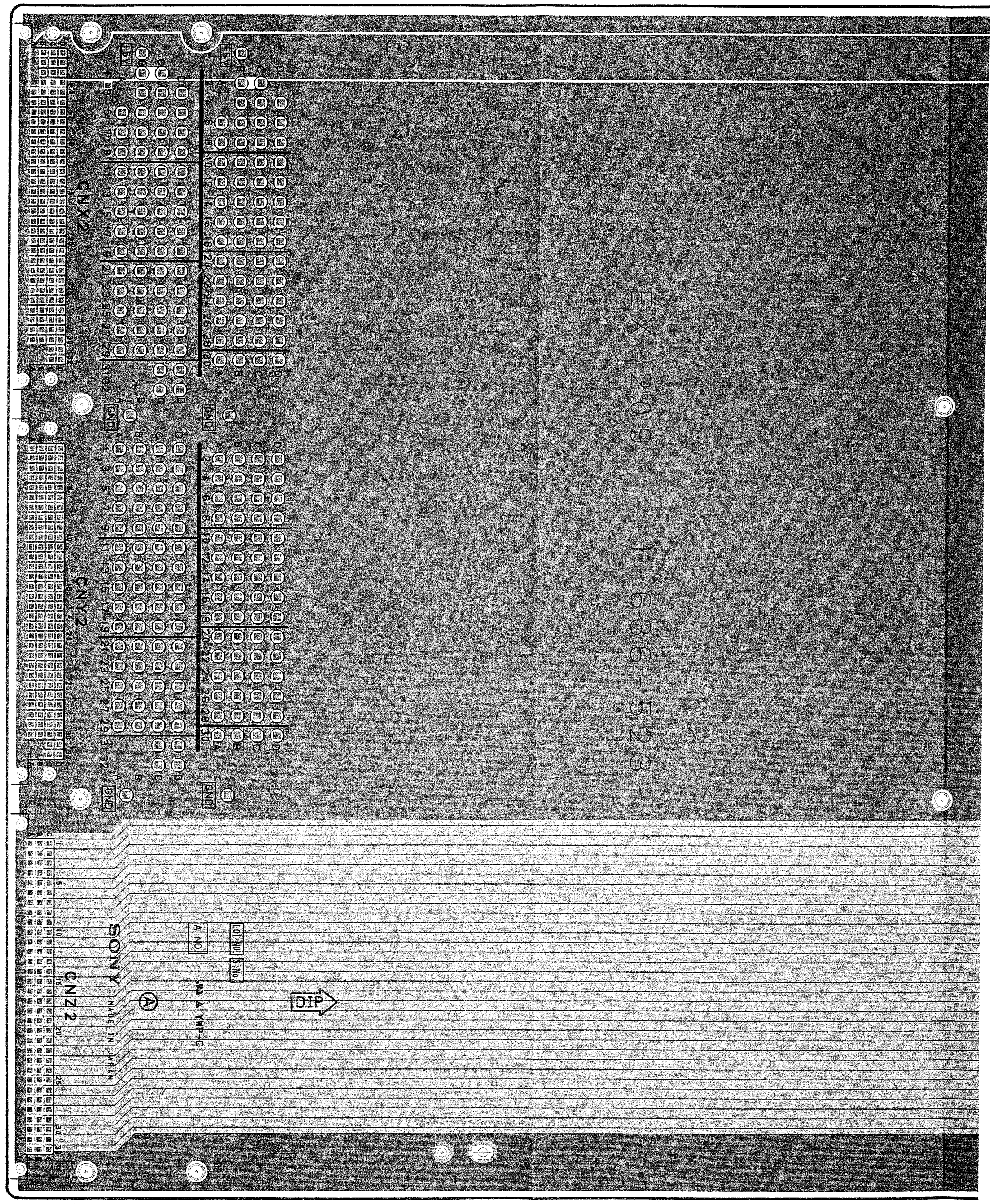

CN1
R1
R2
R3
R4
3
1
LE-76
D3
D1
D4
D2

LE-76
-COMPONENT SIDE-
1-631-489-11
DVS-8000

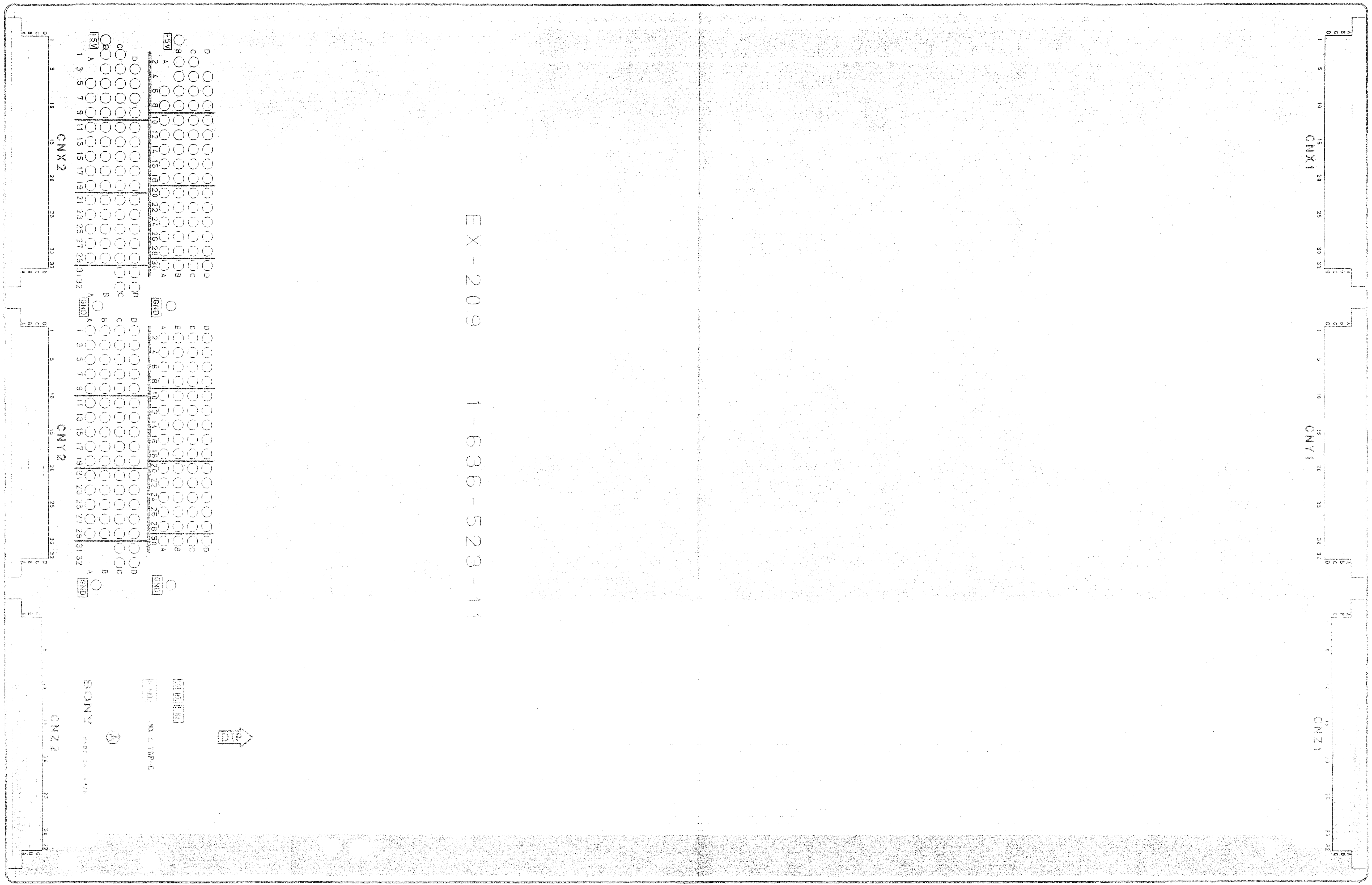

CN1
CNP2 (GND)
CNP3 (+5)
CNP4 (GND)
CNP5 (+5)
CNP6 (GND)
CNP7 (GND)
CNP8 (+5)
CNP9 (GND)
CNX1
CNX2
CNX3
CNX4
CNX5
CNX6
CNX7
CNX8
CNX9
CNX10
CNX11
CNX12
CNX13
CNX14
CNX15
CNX16
CNX17
CNX18
CNY1
CNY2
CNY3
CNY4
CNY5
CNY6
CNY7
CNY8
CNY9
CNY10
CNY11
CNY12
CNY13
CNY14
CNY15
CNY16
CNY17
CNY18
CNZ1
CNZ2
CNZ5
CNZ6
CNZ7
CNZ8
CNZ10
CNZ12
CNZ13
CNZ14
CNZ15
CNZ16
CNZ17
CNZ18
DIP
SONY
1-636-516-13
MB-245

MB-245 **-A SIDE-**
1-636-516-12, 13
DVS-8000

EX-209: EXTENSION BOARD


CNX2
CNY2
CNZ2
+5V
GND
SONY
MADE IN JAPAN
EX-209 1-636-523-11
DIP
LOT NO
S.No
A NO
YWP-C

EX-209: EXTENSION BOARD


CNX2
CNY2
CNZ2
CNX1
CNY1
CNZ1
+5V
GND
A
B
C
D
EX-209 1-636-523-11
SONY
DIP

EX-209 -A SIDE-
1-636-523-11
DVS-8000

SECTION 11
SPARE PARTS AND ACCESSORIES

11-1.PARTS INFORMATION

(1) The shaded and ⚠ -marked components are critical to safety.
Replace only with the same components as specified.

(2) Replacement parts supplied from the Sony Parts Center will sometimes have a different shape and outside view from the parts which are used in the unit. This is due to "accommodating improved parts and/or engineering changes" or "standardization of genuine parts".
•This manual's exploded views and electrical spare parts lists indicate the part numbers of "the present standardized genuine parts".
•Regarding engineering part changes by our engineering department, refer to Sony service bulletins and service manual supplements.

(3) The parts marked with "s" in the SP column of the exploded views and electrical spare parts lists are normally stocked for replacement purposes. The parts marked with "o" in the SP column are not normally required for routine service work. Orders for parts marked with "o" with be processed, but allow for additional delivery time.

(4) Item with no part number and/or no description are not stocked because they are seldom required for routine service.

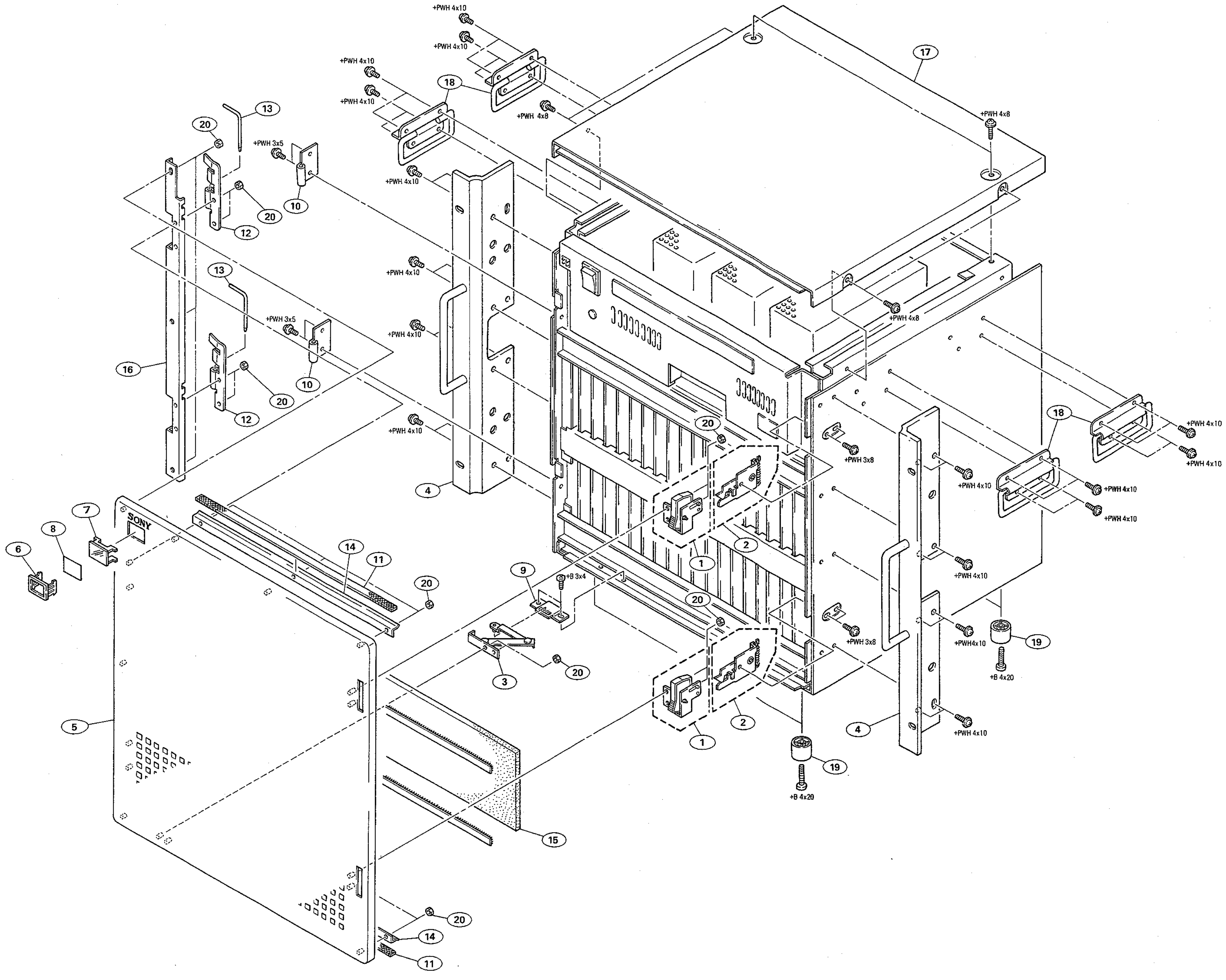
(5) All capacitors are in micro farads unless otherwise specified.
All inductors are in micro henries unless otherwise specified.
All resistors are in ohms.

11-2.EXPLODED VIEW

- Exploded views are composed of the following blocks

(1) Chassis 1
(2) Chassis 2
(3) Power Unit
(4) Rear Panel

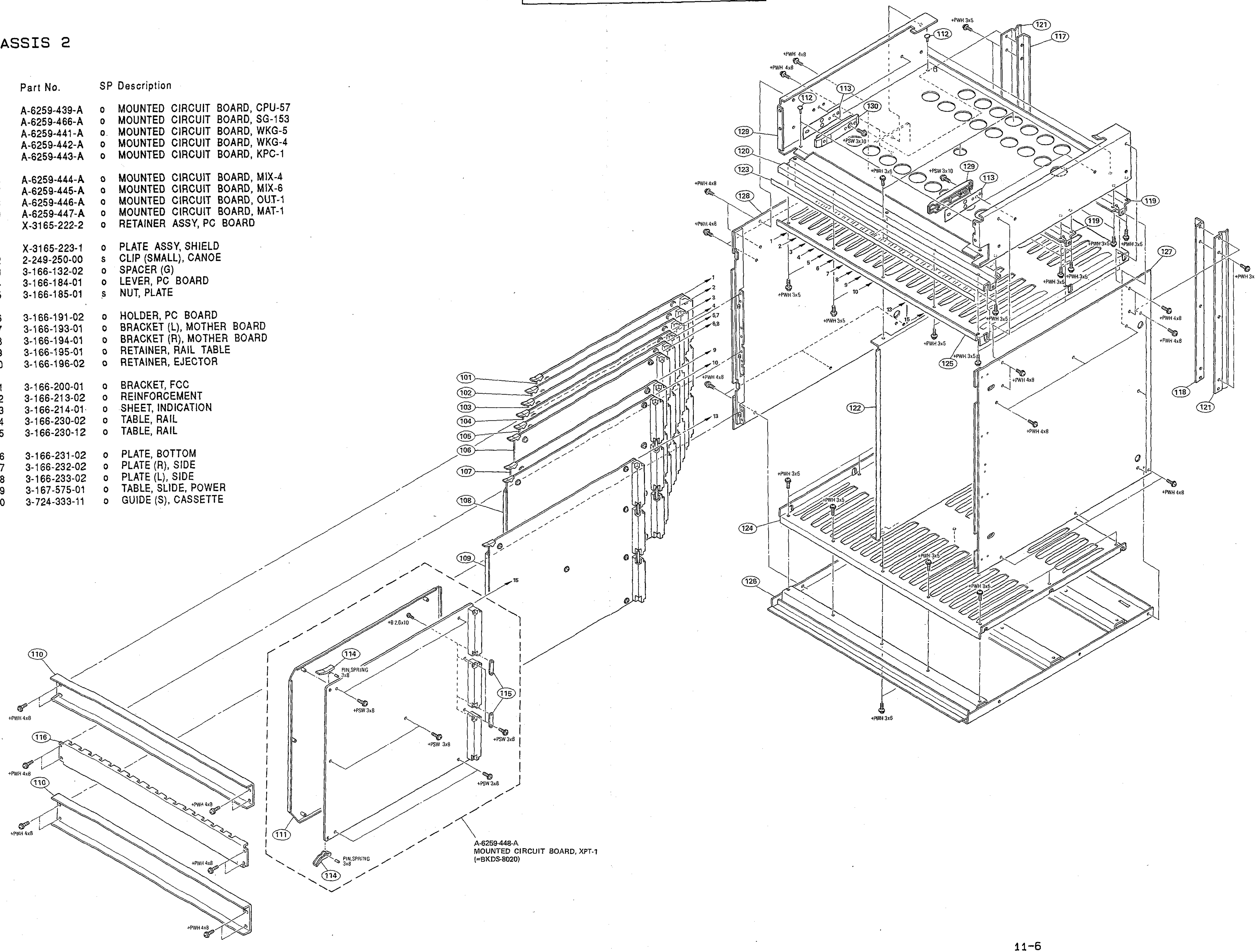
CHASSIS 1


+PWH 4x10
+PWH 4x10
+PWH 4x10
+PWH 4x10
18
17
+PWH 4x8
13
20
+PWH 3x5
10
20
12
13
+PWH 3x5
16
10
20
12
+PWH 4x10
+PWH 4x10
+PWH 4x10
+PWH 4x10
4
+PWH 4x8
20
+PWH 3x8
18
+PWH 4x10
+PWH 4x10
18
+PWH 4x10
+PWH 4x10
+PWH 4x10
+PWH 4x10
7
8
6
14
11
20
9
+B 3x4
1
2
20
3
20
19
+PWH 3x8
+PWH4x10
+B 4x20
5
1
2
4
+PWH 4x10
19
+B 4x20
15
20
14
11

No.	Part No.	SP	Description
1	A-6279-484-A	o	HANDLE ASSY, DOOR
2	X-2127-216-1	o	LOCK ASSY, DOOR
3	X-3165-067-1	o	STOPPER ASSY
4	X-3165-221-1	o	ANGLE ASSY (10U), RACK
5	X-3165-224-2	o	PANEL ASSY, FRONT
6	2-139-192-01	o	FRAME, INDICATOR WINDOW
7	2-139-193-01	o	WINDOW, INDICATOR
8	2-249-353-00	o	COVER, LAMP
9	3-166-131-01	o	TABLE (H), STAY
10	3-166-133-01	o	HINGE (H)
11	3-166-134-01	o	LINE, SHIELD
12	3-166-135-01	o	HINGE (F)
13	3-166-136-01	o	PIN, HINGE
14	3-166-157-01	o	BRACKET, SHIELD LINE
15	3-166-203-02	o	FILTER
16	3-166-223-01	o	PLATE, SIDE, LEFT, PANEL
17	3-166-229-01	o	PLATE, TOP
18	3-167-453-01	o	HANDLE
19	3-642-656-01	s	FOOT
20	4-334-513-00	s	NUT, NYLON

CHASSIS 2

No.	Part No.	SP	Description
101	A-6259-439-A	o	MOUNTED CIRCUIT BOARD, CPU-57
102	A-6259-466-A	o	MOUNTED CIRCUIT BOARD, SG-153
103	A-6259-441-A	o	MOUNTED CIRCUIT BOARD, WKG-5
104	A-6259-442-A	o	MOUNTED CIRCUIT BOARD, WKG-4
105	A-6259-443-A	o	MOUNTED CIRCUIT BOARD, KPC-1
106	A-6259-444-A	o	MOUNTED CIRCUIT BOARD, MIX-4
107	A-6259-445-A	o	MOUNTED CIRCUIT BOARD, MIX-6
108	A-6259-446-A	o	MOUNTED CIRCUIT BOARD, OUT-1
109	A-6259-447-A	o	MOUNTED CIRCUIT BOARD, MAT-1
110	X-3165-222-2	o	RETAINER ASSY, PC BOARD
111	X-3165-223-1	o	PLATE ASSY, SHIELD
112	2-249-250-00	s	CLIP (SMALL), CANOE
113	3-166-132-02	o	SPACER (G)
114	3-166-184-01	o	LEVER, PC BOARD
115	3-166-185-01	s	NUT, PLATE
116	3-166-191-02	o	HOLDER, PC BOARD
117	3-166-193-01	o	BRACKET (L), MOTHER BOARD
118	3-166-194-01	o	BRACKET (R), MOTHER BOARD
119	3-166-195-01	o	RETAINER, RAIL TABLE
120	3-166-196-02	o	RETAINER, EJECTOR
121	3-166-200-01	o	BRACKET, FCC
122	3-166-213-02	o	REINFORCEMENT
123	3-166-214-01	o	SHEET, INDICATION
124	3-166-230-02	o	TABLE, RAIL
125	3-166-230-12	o	TABLE, RAIL
126	3-166-231-02	o	PLATE, BOTTOM
127	3-166-232-02	o	PLATE (R), SIDE
128	3-166-233-02	o	PLATE (L), SIDE
129	3-167-575-01	o	TABLE, SLIDE, POWER
130	3-724-333-11	o	GUIDE (S), CASSETTE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+PWH 3x5
+PWH 4x8
+PSW 3x10
+PSW 3x8
+B 2.6x10
PIN, SPRING 3x8
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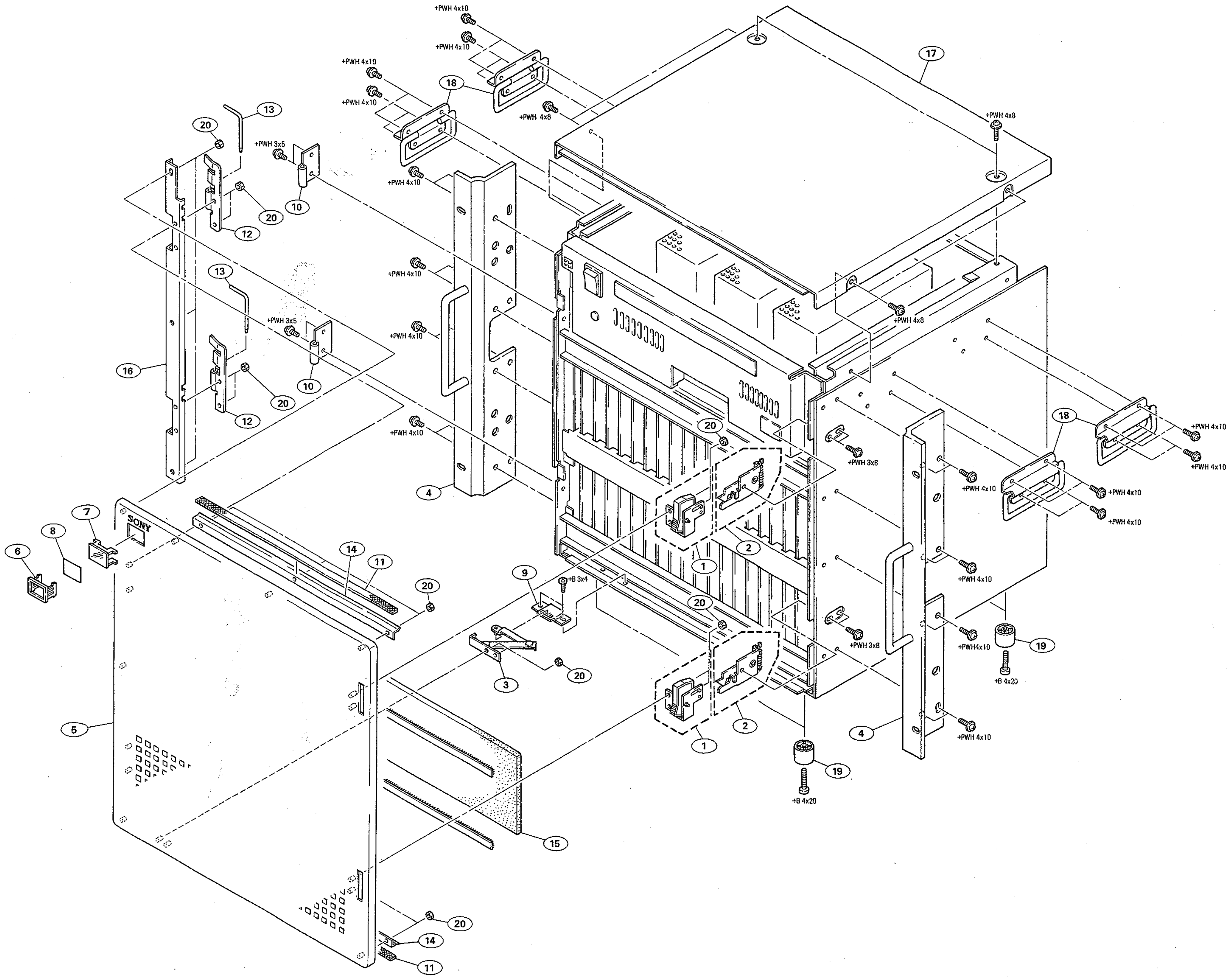
A-6259-448-A
MOUNTED CIRCUIT BOARD, XPT-1
(=BKDS-8020)

CHASSIS 1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+B 3x4
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+PWH 4x10
+PWH 3x8
+PWH4x10
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+B 4x20
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+PWH 4x10
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+B 4x20
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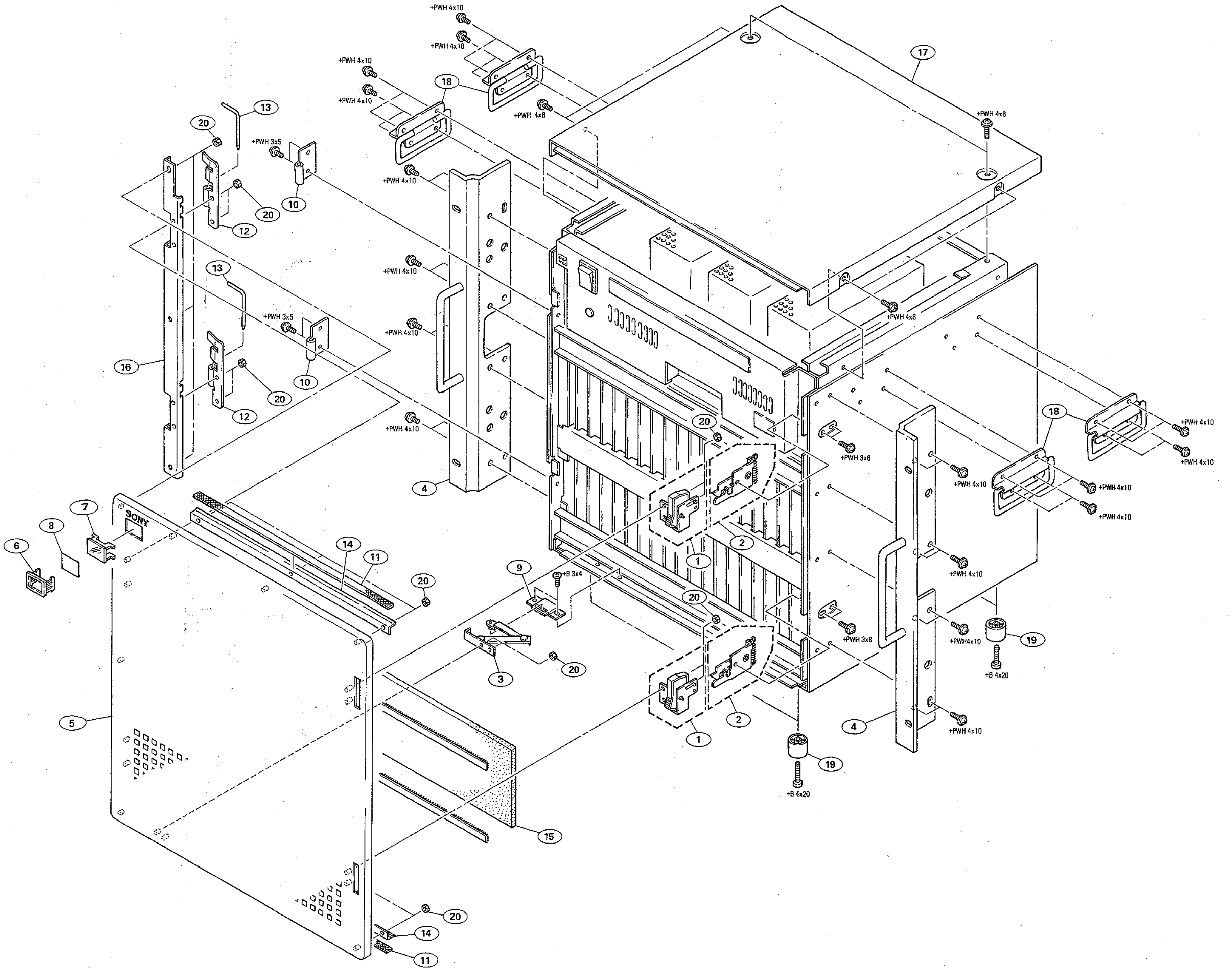
No.	Part No.	SP	Description
1	A-6279-484-A	o	HANDLE ASSY, DOOR
2	X-2127-216-1	o	LOCK ASSY, DOOR
3	X-3165-067-1	o	STOPPER ASSY
4	X-3165-221-1	o	ANGLE ASSY (10U), RACK
5	X-3165-224-2	o	PANEL ASSY, FRONT
6	2-139-192-01	o	FRAME, INDICATOR WINDOW
7	2-139-193-01	o	WINDOW, INDICATOR
8	2-249-353-00	o	COVER, LAMP
9	3-166-131-01	o	TABLE (H), STAY
10	3-166-133-01	o	HINGE (H)
11	3-166-134-01	o	LINE, SHIELD
12	3-166-135-01	o	HINGE (F)
13	3-166-136-01	o	PIN, HINGE
14	3-166-157-01	o	BRACKET, SHIELD LINE
15	3-166-203-02	o	FILTER
16	3-166-223-01	o	PLATE, SIDE, LEFT, PANEL
17	3-166-229-01	o	PLATE, TOP
18	3-167-453-01	o	HANDLE
19	3-642-656-01	s	FOOT
20	4-334-513-00	s	NUT, NYLON

CHASSIS 1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+B 3x4
+B 4x20
SONY
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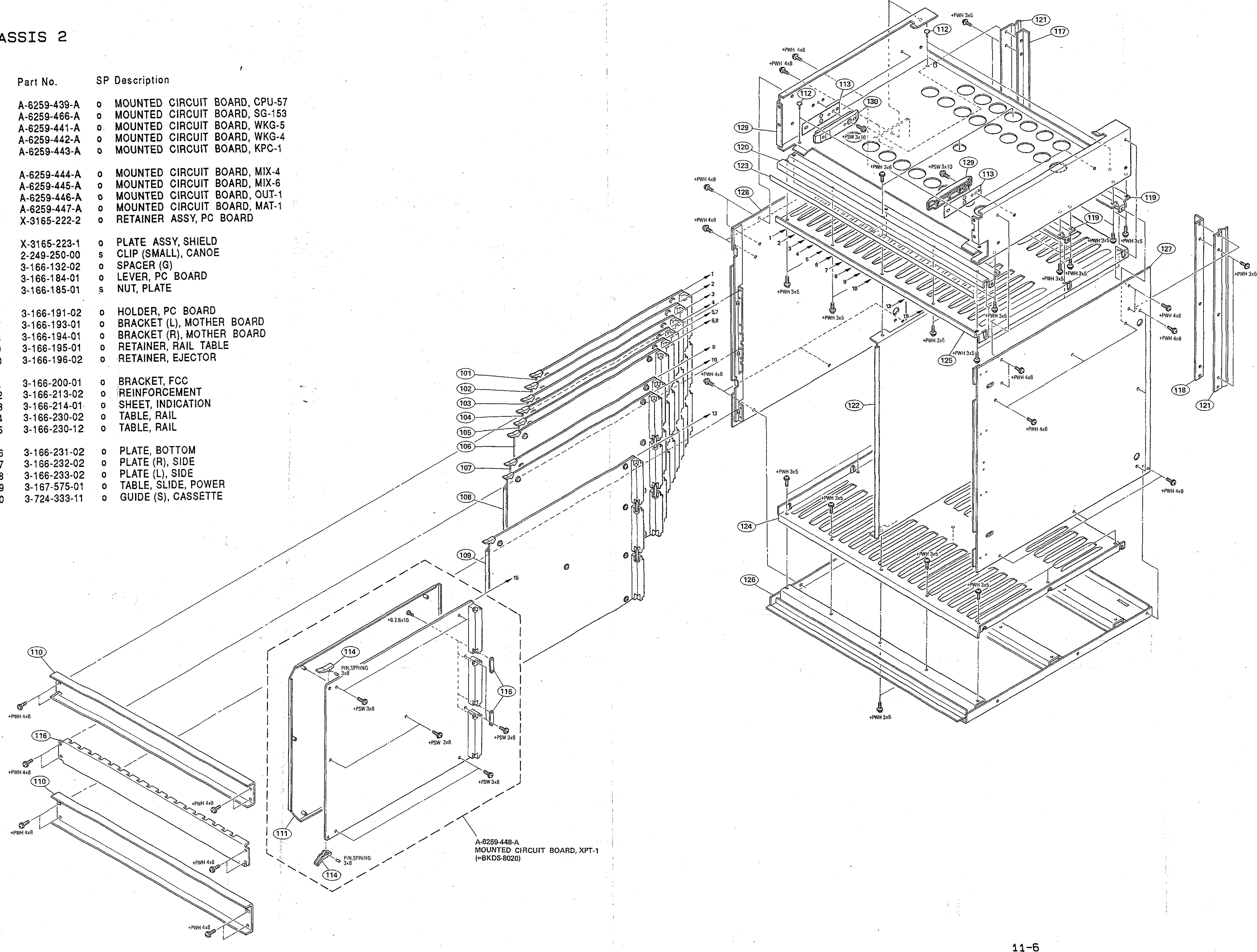
No.	Part No.	SP	Description
1	A-6279-484-A	o	HANDLE ASSY, DOOR
2	X-2127-216-1	o	LOCK ASSY, DOOR
3	X-3165-067-1	o	STOPPER ASSY
4	X-3165-221-1	o	ANGLE ASSY (10U), RACK
5	X-3165-224-2	o	PANEL ASSY, FRONT
6	2-139-192-01	o	FRAME, INDICATOR WINDOW
7	2-139-193-01	o	WINDOW, INDICATOR
8	2-249-353-00	o	COVER, LAMP
9	3-166-131-01	o	TABLE (H), STAY
10	3-166-133-01	o	HINGE (H)
11	3-166-134-01	o	LINE, SHIELD
12	3-166-135-01	o	HINGE (F)
13	3-166-136-01	o	PIN, HINGE
14	3-166-157-01	o	BRACKET, SHIELD LINE
15	3-166-203-02	o	FILTER
16	3-166-223-01	o	PLATE, SIDE, LEFT, PANEL
17	3-166-229-01	o	PLATE, TOP
18	3-167-453-01	o	HANDLE
19	3-642-656-01	s	FOOT
20	4-334-513-00	s	NUT, NYLON

CHASSIS 2

No.	Part No.	SP	Description
101	A-6259-439-A	o	MOUNTED CIRCUIT BOARD, CPU-57
102	A-6259-466-A	o	MOUNTED CIRCUIT BOARD, SG-153
103	A-6259-441-A	o	MOUNTED CIRCUIT BOARD, WKG-5
104	A-6259-442-A	o	MOUNTED CIRCUIT BOARD, WKG-4
105	A-6259-443-A	o	MOUNTED CIRCUIT BOARD, KPC-1
106	A-6259-444-A	o	MOUNTED CIRCUIT BOARD, MIX-4
107	A-6259-445-A	o	MOUNTED CIRCUIT BOARD, MIX-6
108	A-6259-446-A	o	MOUNTED CIRCUIT BOARD, OUT-1
109	A-6259-447-A	o	MOUNTED CIRCUIT BOARD, MAT-1
110	X-3165-222-2	o	RETAINER ASSY, PC BOARD
111	X-3165-223-1	o	PLATE ASSY, SHIELD
112	2-249-250-00	s	CLIP (SMALL), CANOE
113	3-166-132-02	o	SPACER (G)
114	3-166-184-01	o	LEVER, PC BOARD
115	3-166-185-01	s	NUT, PLATE
116	3-166-191-02	o	HOLDER, PC BOARD
117	3-166-193-01	o	BRACKET (L), MOTHER BOARD
118	3-166-194-01	o	BRACKET (R), MOTHER BOARD
119	3-166-195-01	o	RETAINER, RAIL TABLE
120	3-166-196-02	o	RETAINER, EJECTOR
121	3-166-200-01	o	BRACKET, FCC
122	3-166-213-02	o	REINFORCEMENT
123	3-166-214-01	o	SHEET, INDICATION
124	3-166-230-02	o	TABLE, RAIL
125	3-166-230-12	o	TABLE, RAIL
126	3-166-231-02	o	PLATE, BOTTOM
127	3-166-232-02	o	PLATE (R), SIDE
128	3-166-233-02	o	PLATE (L), SIDE
129	3-167-575-01	o	TABLE, SLIDE, POWER
130	3-724-333-11	o	GUIDE (S), CASSETTE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+PWH 4x8
+PWH 3x5
+PSW 3x10
+PWH 3x6
+PSW 3x8
+B 2.6x10
PIN,SPRING 3x8
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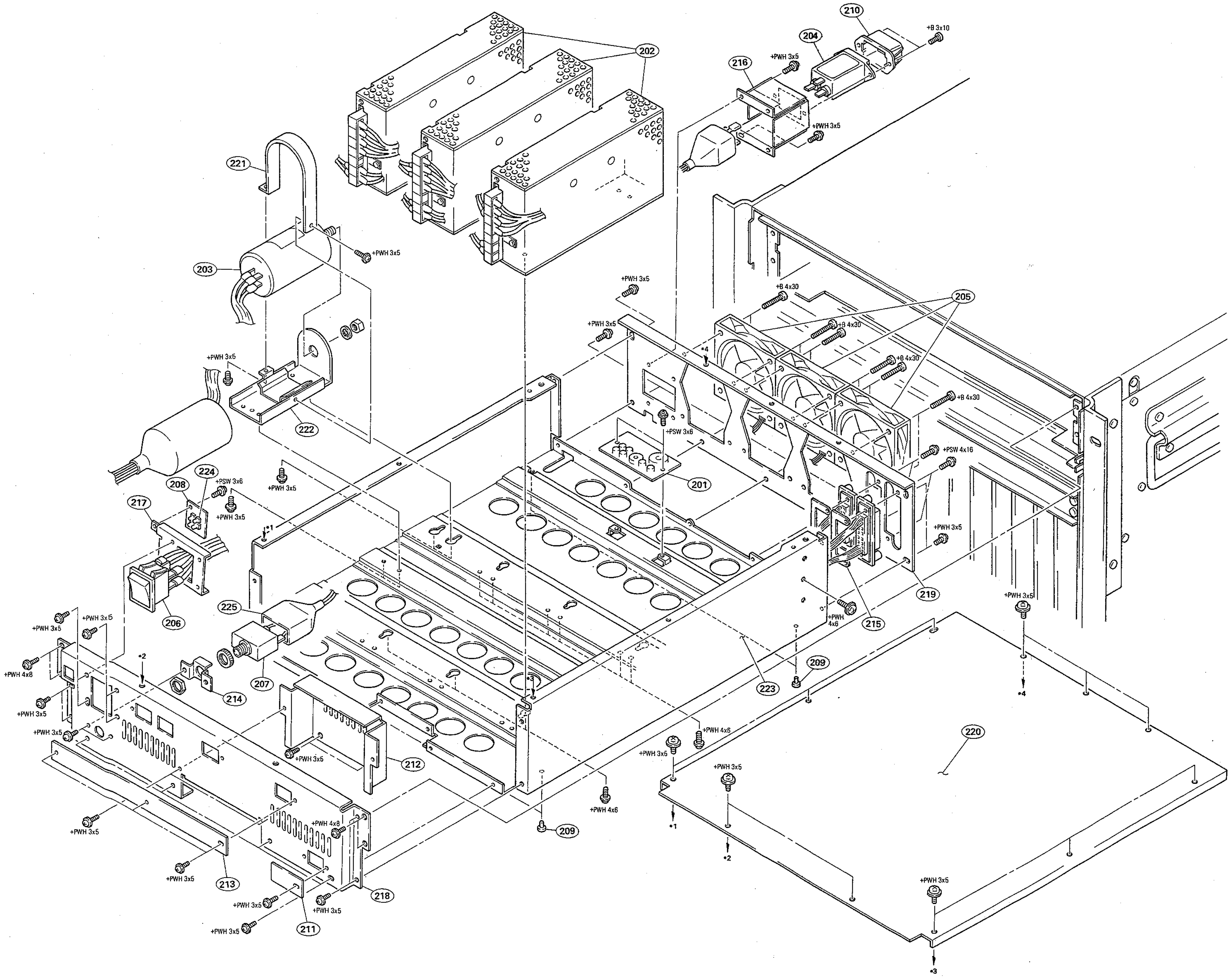
A-6259-448-A
MOUNTED CIRCUIT BOARD, XPT-1
(=BKDS-8020)

POWER UNIT (=BKDS-8090)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+PSW 3x6
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+PWH 3x5
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+PWH 4x8
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+PWN 4x6
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+PWH 4x6
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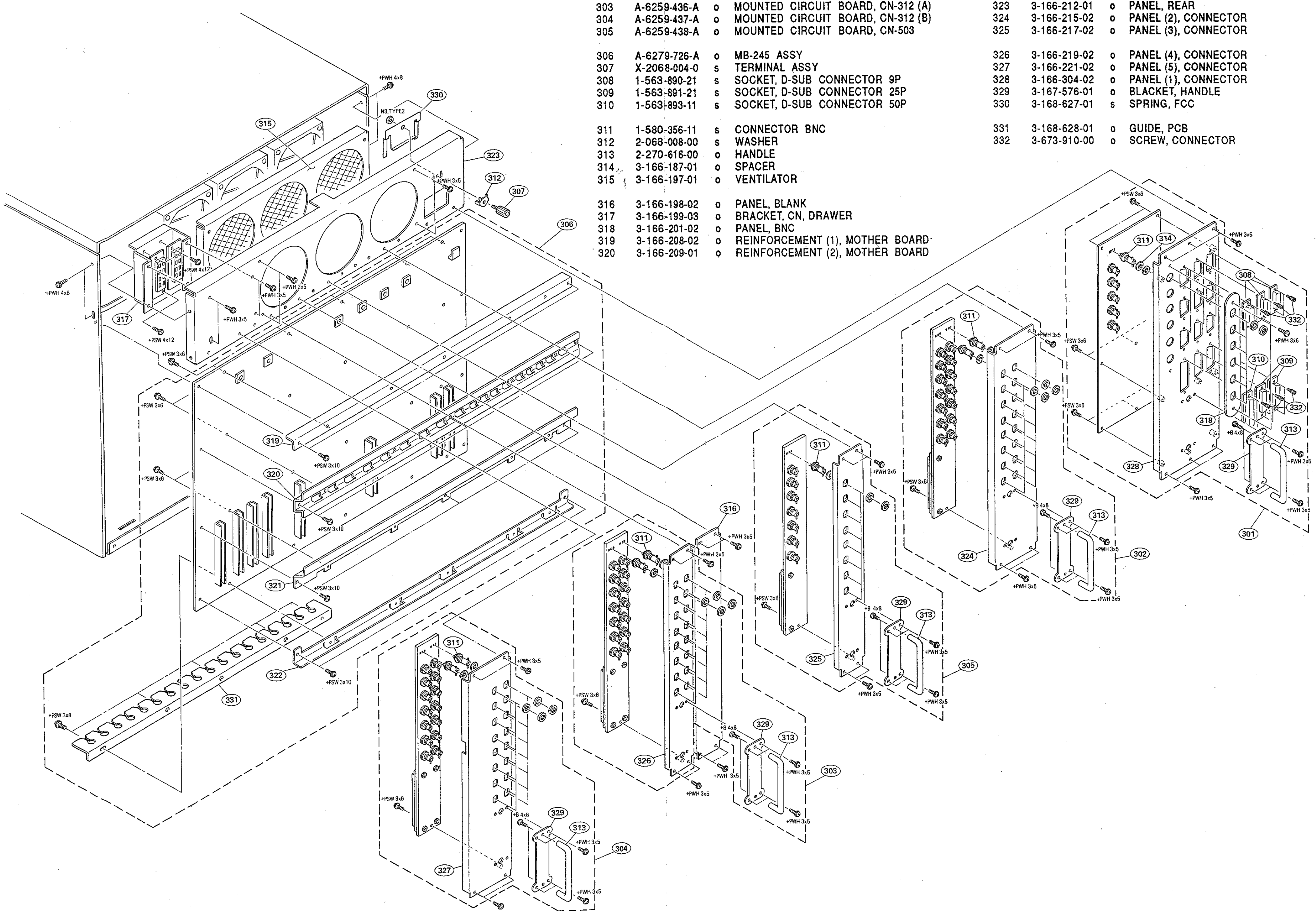
No.	Part No.	SP	Description
201	A-6263-090-A	o	MOUNTED CIRCUIT BOARD, CN-456
202	⚠1-413-414-13	s	SWITCHING REGULATOR
203	⚠1-424-136-11	s	FILTER, NOISE
204	⚠1-526-813-12	s	INLET, AC 3P, MALE
205	1-541-329-31	s	FAN, DC (WITH ALARM)
206	⚠1-572-345-11	s	SWITCH, ROCKER (AC POWER)
207	⚠1-576-036-11	s	BREAKER, CIRCUIT, 6A 250V
208	1-631-489-11	o	PC BOARD, LE-76
209	2-249-250-00	s	CLIP (SMALL), CANOE
210	2-990-241-01	o	HOLDER (A), PLUG
211	3-166-137-01	o	COVER, ADJUSTMENT WINDOW
212	3-166-160-01	o	COVER, HANDLE
213	3-166-188-02	o	COVER (2), ADJUSTMENT WINDOW
214	3-166-189-02	o	BRACKET, BREAKER
215	3-166-190-11	s	NUT, PLATE
216	3-166-206-02	o	BRACKET, AC INLET
217	3-166-207-01	o	BRACKET, AC SW
218	3-166-224-03	o	PANEL, FRONT, POWER
219	3-166-225-02	o	PANEL, REAR, POWER
220	3-166-305-02	o	PLATE, TOP (BKDS-8090 ONLY)
221	3-167-572-01	o	BRACKET (2), FILTER
222	3-167-573-01	o	BRACKET (1), FILTER
223	3-167-574-01	o	CHASSIS, POWER
224	3-674-390-00	o	HOLDER (B), LED
225	3-723-892-01	o	COVER, CIRCUIT BREAKER

REAR PANEL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N3,TYPE2
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+PSW 4x12
+PSW 3x6
+PSW 3x10
+PSW 3x8
+B 4x8

REAR PANEL REAR PANEL

No.	Part No.	SP	Description
301	A-6259-434-A	o	MOUNTED CIRCUIT BOARD, CN-310
302	A-6259-435-A	o	MOUNTED CIRCUIT BOARD, CN-311
303	A-6259-436-A	o	MOUNTED CIRCUIT BOARD, CN-312 (A)
304	A-6259-437-A	o	MOUNTED CIRCUIT BOARD, CN-312 (B)
305	A-6259-438-A	o	MOUNTED CIRCUIT BOARD, CN-503
306	A-6279-726-A	o	MB-245 ASSY
307	X-2068-004-0	s	TERMINAL ASSY
308	1-563-890-21	s	SOCKET, D-SUB CONNECTOR 9P
309	1-563-891-21	s	SOCKET, D-SUB CONNECTOR 25P
310	1-563-893-11	s	SOCKET, D-SUB CONNECTOR 50P
311	1-580-356-11	s	CONNECTOR BNC
312	2-068-008-00	s	WASHER
313	2-270-616-00	o	HANDLE
314	3-166-187-01	o	SPACER
315	3-166-197-01	o	VENTILATOR
316	3-166-198-02	o	PANEL, BLANK
317	3-166-199-03	o	BRACKET, CN, DRAWER
318	3-166-201-02	o	PANEL, BNC
319	3-166-208-02	o	REINFORCEMENT (1), MOTHER BOARD
320	3-166-209-01	o	REINFORCEMENT (2), MOTHER BOARD
321	3-166-210-02	o	REINFORCEMENT (3), MOTHER BOARD
322	3-166-211-02	o	REINFORCEMENT (4), MOTHER BOARD
323	3-166-212-01	o	PANEL, REAR
324	3-166-215-02	o	PANEL (2), CONNECTOR
325	3-166-217-02	o	PANEL (3), CONNECTOR
326	3-166-219-02	o	PANEL (4), CONNECTOR
327	3-166-221-02	o	PANEL (5), CONNECTOR
328	3-166-304-02	o	PANEL (1), CONNECTOR
329	3-167-576-01	o	BLACKET, HANDLE
330	3-168-627-01	s	SPRING, FCC
331	3-168-628-01	o	GUIDE, PCB
332	3-673-910-00	o	SCREW, CONNECTOR

11-3. ELECTRICAL PARTS LIST

General Purpose Electrical Parts List

Parts that are not listed in the "reference numbers order list" are shown in following list.
Reference numbers are omitted.

CAPACITOR, CERAMIC, STACKED

Part No.	SP	Description
1-162-757-11	s	CAP, CERAMIC 220pF 5% 50V
1-162-762-11	s	CAP, CERAMIC 560pF 5% 50V
1-162-764-11	s	CAP, CERAMIC 820pF 5% 50V
1-162-765-11	s	CAP, CERAMIC 0.001 5% 50V
1-162-769-11	s	CAP, CERAMIC 0.0022 5% 50V
1-162-777-11	s	CAP, CERAMIC 0.01 5% 50V
1-162-781-11	s	CAP, CERAMIC 0.022 5% 50V
1-162-788-11	s	CAP, CERAMIC 0.0033 10% 50V
1-162-790-11	s	CAP, CERAMIC 0.0047 10% 50V
1-162-806-11	s	CAP, CERAMIC 0.1 10% 50V
1-162-810-11	s	CAP, CERAMIC 0.22 10% 50V
1-162-812-11	s	CAP, CERAMIC 0.33 10% 50V
1-161-883-11	s	CAP, CERAMIC 0.0015 50V
1-161-884-11	s	CAP, CERAMIC 0.0022 50V
1-161-885-11	s	CAP, CERAMIC 0.0033 50V
1-161-886-11	s	CAP, CERAMIC 0.0047 50V
1-161-887-11	s	CAP, CERAMIC 0.0068 50V
1-161-888-11	s	CAP, CERAMIC 0.01 50V
1-161-889-11	s	CAP, CERAMIC 0.015 50V
1-161-890-11	s	CAP, CERAMIC 0.022 50V
1-161-891-11	s	CAP, CERAMIC 0.033 50V
1-161-892-11	s	CAP, CERAMIC 0.047 50V
1-161-893-11	s	CAP, CERAMIC 0.068 50V
1-161-485-00	s	CAP, CERAMIC 0.1 50V
1-161-895-11	s	CAP, CERAMIC 0.15 50V
1-161-896-11	s	CAP, CERAMIC 0.22 50V
1-161-897-11	s	CAP, CERAMIC 0.33 50V
1-161-898-11	s	CAP, CERAMIC 0.47 50V
1-161-899-11	s	CAP, CERAMIC 0.68 50V
1-161-900-11	s	CAP, CERAMIC 1.0 50V

CAPACITOR, ELECTROLYTIC

Part No.	SP	Description
1-124-902-00	s	CAP, ELECT 0.47 20% 50V
1-124-791-11	s	CAP, ELECT 1.0 20% 100V
1-124-925-11	s	CAP, ELECT 2.2 20% 100V
1-123-382-00	s	CAP, ELECT 3.3 20% 100V
1-124-927-00	s	CAP, ELECT 4.7 20% 100V
1-123-875-91	s	CAP, ELECT 10 20% 50V
1-124-915-11	s	CAP, ELECT 10 20% 63V
1-124-667-11	s	CAP, ELECT 10 20% 100V
1-124-908-11	s	CAP, ELECT 22 20% 50V
1-124-916-11	s	CAP, ELECT 22 20% 63V
1-124-929-11	s	CAP, ELECT 22 20% 100V
1-124-963-11	s	CAP, ELECT 33 20% 16V
1-124-482-11	s	CAP, ELECT 33 20% 35V
1-124-917-11	s	CAP, ELECT 33 20% 63V
1-124-930-11	s	CAP, ELECT 33 20% 100V
1-124-446-11	s	CAP, ELECT 47 20% 10V
1-124-477-11	s	CAP, ELECT 47 20% 25V
1-124-910-11	s	CAP, ELECT 47 20% 50V
1-124-918-11	s	CAP, ELECT 47 20% 63V
1-124-931-11	s	CAP, ELECT 47 20% 100V
1-124-443-00	s	CAP, ELECT 100 20% 10V
1-126-101-11	s	CAP, ELECT 100 20% 16V
1-124-478-11	s	CAP, ELECT 100 20% 25V
1-124-122-11	s	CAP, ELECT 100 20% 50V
1-124-572-11	s	CAP, ELECT 100 20% 63V
1-123-605-00	s	CAP, ELECT 100 20% 100V
1-124-444-00	s	CAP, ELECT 220 20% 10V
1-124-120-11	s	CAP, ELECT 220 20% 25V
1-124-484-11	s	CAP, ELECT 220 20% 35V
1-124-911-11	s	CAP, ELECT 220 20% 50V
1-124-919-51	s	CAP, ELECT 220 20% 63V
1-124-628-11	s	CAP, ELECT 220 20% 100V
1-124-442-00	s	CAP, ELECT 330 20% 6.3V
1-124-604-00	s	CAP, ELECT 330 20% 10V
1-124-119-00	s	CAP, ELECT 330 20% 16V
1-124-479-11	s	CAP, ELECT 330 20% 25V
1-124-485-11	s	CAP, ELECT 330 20% 35V
1-124-912-11	s	CAP, ELECT 330 20% 50V
1-124-472-11	s	CAP, ELECT 470 20% 10V
1-124-475-11	s	CAP, ELECT 470 20% 16V
1-124-480-11	s	CAP, ELECT 470 20% 25V
1-126-104-11	s	CAP, ELECT 470 20% 35V
1-124-913-11	s	CAP, ELECT 470 20% 50V
1-124-921-11	s	CAP, ELECT 470 20% 63V
1-124-471-00	s	CAP, ELECT 1000 20% 6.3V
1-124-473-11	s	CAP, ELECT 1000 20% 10V
1-124-555-00	s	CAP, ELECT 1000 20% 16V
1-124-557-11	s	CAP, ELECT 1000 20% 25V
1-126-105-11	s	CAP, ELECT 1000 20% 35V
1-124-637-11	s	CAP, ELECT 1000 20% 50V
1-124-922-11	s	CAP, ELECT 1000 20% 63V
1-124-893-11	s	CAP, ELECT 2200 20% 10V
1-124-556-11	s	CAP, ELECT 2200 20% 16V
1-124-563-11	s	CAP, ELECT 2200 20% 25V
1-124-618-11	s	CAP, ELECT 2200 20% 35V
1-124-607-11	s	CAP, ELECT 2200 20% 50V
1-124-621-11	s	CAP, ELECT 3300 20% 6.3V
1-124-887-00	s	CAP, ELECT 3300 20% 16V
1-124-636-00	s	CAP, ELECT 3300 20% 25V
1-124-762-00	s	CAP, ELECT 4700 20% 10V

(CAPACITOR, ELECTROLYTIC)

Part No.	SP	Description
1-124-898-11	s	CAP, ELECT 4700 20% 16V
1-124-564-11	s	CAP, ELECT 4700 20% 25V
1-124-891-11	s	CAP, ELECT 10000 20% 6.3V
1-124-763-00	s	CAP, ELECT 10000 20% 10V
1-124-902-00	s	CAP, ELECT 0.47 20% 50V
1-124-791-11	s	CAP, ELECT 1.0 20% 100V
1-124-925-11	s	CAP, ELECT 2.2 20% 100V
1-123-382-00	s	CAP, ELECT 3.3 20% 100V
1-124-927-00	s	CAP, ELECT 4.7 20% 100V
1-123-875-91	s	CAP, ELECT 10 20% 50V
1-124-908-11	s	CAP, ELECT 22 20% 50V
1-124-963-11	s	CAP, ELECT 33 20% 16V
1-124-482-11	s	CAP, ELECT 33 20% 35V
1-124-917-11	s	CAP, ELECT 33 20% 63V
1-124-446-11	s	CAP, ELECT 47 20% 10V
1-124-477-11	s	CAP, ELECT 47 20% 25V
1-124-910-11	s	CAP, ELECT 47 20% 50V
1-124-443-00	s	CAP, ELECT 100 20% 10V
1-126-101-11	s	CAP, ELECT 100 20% 16V
1-124-478-11	s	CAP, ELECT 100 20% 25V
1-124-122-11	s	CAP, ELECT 100 20% 50V
1-124-444-00	s	CAP, ELECT 220 20% 10V
1-124-120-11	s	CAP, ELECT 220 20% 25V
1-124-484-11	s	CAP, ELECT 220 20% 35V
1-124-911-11	s	CAP, ELECT 220 20% 50V
1-124-442-00	s	CAP, ELECT 330 20% 6.3V
1-124-604-00	s	CAP, ELECT 330 20% 10V
1-124-119-00	s	CAP, ELECT 330 20% 16V
1-124-479-11	s	CAP, ELECT 330 20% 25V
1-124-485-11	s	CAP, ELECT 330 20% 35V
1-124-912-11	s	CAP, ELECT 330 20% 50V
1-124-472-11	s	CAP, ELECT 470 20% 10V
1-124-475-11	s	CAP, ELECT 470 20% 16V
1-124-480-11	s	CAP, ELECT 470 20% 25V
1-126-104-11	s	CAP, ELECT 470 20% 35V
1-124-913-11	s	CAP, ELECT 470 20% 50V

RESISTOR, CHIP METAL

Part No.	SP	Description
1-216-603-11	s	RES, CHIP METAL 10 1% 1/10W
1-216-605-11	s	RES, CHIP METAL 12 1% 1/10W
1-216-609-11	s	RES, CHIP METAL 18 1% 1/10W
1-216-611-11	s	RES, CHIP METAL 22 1% 1/10W
1-216-614-11	s	RES, CHIP METAL 30 1% 1/10W
1-216-617-11	s	RES, CHIP METAL 39 1% 1/10W
1-216-619-11	s	RES, CHIP METAL 47 1% 1/10W
1-216-620-11	s	RES, CHIP METAL 51 1% 1/10W
1-216-623-11	s	RES, CHIP METAL 68 1% 1/10W
1-216-624-11	s	RES, CHIP METAL 75 1% 1/10W
1-216-625-11	s	RES, CHIP METAL 82 1% 1/10W
1-216-626-11	s	RES, CHIP METAL 91 1% 1/10W
1-216-627-11	s	RES, CHIP METAL 100 1% 1/10W
1-216-629-11	s	RES, CHIP METAL 120 1% 1/10W
1-216-631-11	s	RES, CHIP METAL 150 1% 1/10W
1-216-633-11	s	RES, CHIP METAL 180 1% 1/10W
1-216-634-11	s	RES, CHIP METAL 200 1% 1/10W
1-216-635-11	s	RES, CHIP METAL 220 1% 1/10W
1-216-636-11	s	RES, CHIP METAL 240 1% 1/10W
1-216-637-11	s	RES, CHIP METAL 270 1% 1/10W
1-216-638-11	s	RES, CHIP METAL 300 1% 1/10W
1-216-639-11	s	RES, CHIP METAL 330 1% 1/10W
1-216-640-11	s	RES, CHIP METAL 360 1% 1/10W
1-216-641-11	s	RES, CHIP METAL 390 1% 1/10W
1-216-642-11	s	RES, CHIP METAL 430 1% 1/10W
1-216-643-11	s	RES, CHIP METAL 470 1% 1/10W
1-216-644-11	s	RES, CHIP METAL 510 1% 1/10W
1-216-645-11	s	RES, CHIP METAL 560 1% 1/10W
1-216-647-11	s	RES, CHIP METAL 680 1% 1/10W
1-216-648-11	s	RES, CHIP METAL 750 1% 1/10W
1-216-649-11	s	RES, CHIP METAL 820 1% 1/10W
1-216-650-11	s	RES, CHIP METAL 910 1% 1/10W
1-216-651-11	s	RES, CHIP METAL 1.0k 1% 1/10W
1-216-652-11	s	RES, CHIP METAL 1.1k 1% 1/10W
1-216-653-11	s	RES, CHIP METAL 1.2k 1% 1/10W
1-216-655-11	s	RES, CHIP METAL 1.5k 1% 1/10W
1-216-656-11	s	RES, CHIP METAL 1.6k 1% 1/10W
1-216-657-11	s	RES, CHIP METAL 1.8k 1% 1/10W
1-216-658-11	s	RES, CHIP METAL 2k 1% 1/10W
1-216-659-11	s	RES, CHIP METAL 2.2k 1% 1/10W
1-216-660-11	s	RES, CHIP METAL 2.4k 1% 1/10W
1-216-661-11	s	RES, CHIP METAL 2.7k 1% 1/10W
1-216-662-11	s	RES, CHIP METAL 3k 1% 1/10W
1-216-663-11	s	RES, CHIP METAL 3.3k 1% 1/10W
1-216-664-11	s	RES, CHIP METAL 3.5k 1% 1/10W
1-216-665-11	s	RES, CHIP METAL 3.9k 1% 1/10W
1-216-666-11	s	RES, CHIP METAL 4.3k 1% 1/10W
1-216-667-11	s	RES, CHIP METAL 4.7k 1% 1/10W
1-216-668-11	s	RES, CHIP METAL 5.1k 1% 1/10W
1-216-669-11	s	RES, CHIP METAL 5.6k 1% 1/10W
1-216-670-11	s	RES, CHIP METAL 6.2k 1% 1/10W
1-216-671-11	s	RES, CHIP METAL 6.8k 1% 1/10W
1-216-672-11	s	RES, CHIP METAL 7.5k 1% 1/10W
1-216-673-11	s	RES, CHIP METAL 8.2k 1% 1/10W
1-216-674-11	s	RES, CHIP METAL 9.1k 1% 1/10W
1-216-675-11	s	RES, CHIP METAL 10k 1% 1/10W
1-216-676-11	s	RES, CHIP METAL 11k 1% 1/10W
1-216-677-11	s	RES, CHIP METAL 12k 1% 1/10W
1-216-678-11	s	RES, CHIP METAL 13k 1% 1/10W
1-216-679-11	s	RES, CHIP METAL 15k 1% 1/10W

(RESISTOR, CHIP METAL)

Part No.	SP	Description
1-216-680-11	s	RES, CHIP METAL 16k 1% 1/10W
1-216-681-11	s	RES, CHIP METAL 18k 1% 1/10W
1-216-682-11	s	RES, CHIP METAL 20k 1% 1/10W
1-216-683-11	s	RES, CHIP METAL 22k 1% 1/10W
1-216-684-11	s	RES, CHIP METAL 24k 1% 1/10W
1-216-685-11	s	RES, CHIP METAL 27k 1% 1/10W
1-216-686-11	s	RES, CHIP METAL 30k 1% 1/10W
1-216-687-11	s	RES, CHIP METAL 33k 1% 1/10W
1-216-688-11	s	RES, CHIP METAL 36k 1% 1/10W
1-216-689-11	s	RES, CHIP METAL 39k 1% 1/10W
1-216-690-11	s	RES, CHIP METAL 43k 1% 1/10W
1-216-691-11	s	RES, CHIP METAL 49k 1% 1/10W
1-216-692-11	s	RES, CHIP METAL 51k 1% 1/10W
1-216-693-11	s	RES, CHIP METAL 56k 1% 1/10W
1-216-694-11	s	RES, CHIP METAL 62k 1% 1/10W
1-216-695-11	s	RES, CHIP METAL 68k 1% 1/10W
1-216-696-11	s	RES, CHIP METAL 75k 1% 1/10W
1-216-697-11	s	RES, CHIP METAL 82k 1% 1/10W
1-216-698-11	s	RES, CHIP METAL 91k 1% 1/10W
1-216-699-11	s	RES, CHIP METAL 100k 1% 1/10W

CPU-57 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-439-A	o	MOUNTED CIRCUIT BOARD, CPU-57
2pcs	3-166-184-01	o	LEVER, PC BOARD
6pcs	7-621-773-87	s	SCREW +B 2.6X10
2pcs	7-622-207-05	s	N 2.6, TYPE 2
2pcs	7-626-320-11	s	PIN, SPRING 3X8
8pcs	7-682-948-01	s	SCREW +PSW 3X8
BT1	1-528-180-11	s	BATTERY, NICKEL CADMIUM
C1,2	1-126-396-11	s	ELECT, CHIP 47uF 20% 16V
C3-13	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C14-21	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C22-25	1-163-235-11	s	CERAMIC, CHIP 22pF 5% 50V
C27	1-163-009-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C28	1-163-251-11	s	CERAMIC, CHIP 100pF 5% 50V
C29-34	1-163-235-11	s	CERAMIC, CHIP 22pF 5% 50V
C35-41	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C42-164	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
CN1	1-564-133-11	o	CONNECTOR, RIBBON CABLE 20P
CN2	1-506-484-11	s	CONNECTOR, 5P, MALE
CNI2	1-526-996-11	s	SOCKET, IC (PGA TYPE) 68P
CNI12,15	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI28,29	1-526-660-21	s	SOCKET, IC (DP) 32P
CNI30	1-526-659-00	s	SOCKET, IC (DP) 28P
CNX1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNY1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNZ1	1-506-748-11	s	CONNECTOR, DIN 96P, MALE
COR1	1-566-390-11	s	CONNECTOR, 16P, MALE
D1-4	8-719-400-35	s	LED LN35BP, GRN
D5	8-719-800-60	s	LED TLR214, RED
D6	8-719-981-00	s	DIODE ERC81-004
D7	8-719-400-35	s	LED LN35BP, GRN
D8-26	8-719-800-76	s	DIODE 1SS226
D27-36	8-719-400-35	s	LED LN35BP, GRN
F1,2	⚠1-576-031-11	s	FUSE, MICRO 10A
IC1	8-759-039-06	s	IC MC68020RC33
IC2	8-759-039-07	s	IC MC68881RC33
IC3	8-759-505-28	s	IC MAX691CPE
IC4	8-759-927-46	s	IC SN74HC00NS
IC5	8-759-243-09	s	IC TC74AC74F
IC7	8-759-243-39	s	IC TC74AC00F
IC8	8-759-992-03	s	IC 74F38SJ
IC9	8-759-243-62	s	IC TC74AC32F
IC10	8-759-926-74	s	IC SN74HC393NS
IC11	8-759-243-06	s	IC TC74AC04F
IC12	8-759-725-30	s	IC GAL20V8A-10LP
IC13,14	8-759-725-03	s	IC GAL16V8A-10LP
IC15	8-759-725-30	s	IC GAL20V8A-10LP
IC16	8-759-725-03	s	IC GAL16V8A-10LP
IC17,18	8-759-244-75	s	IC TC74AC541F
IC19,20	8-759-244-24	s	IC TC74AC245P
IC21-23	8-759-244-75	s	IC TC74AC541F
IC24-27	8-759-244-25	s	IC TC74AC245F
IC28	8-759-704-69	s	IC 27C2001D-CPU E-V1.0
IC29	8-759-704-70	s	IC 27C2001D-CPU O-V1.0
IC30	8-759-748-05	s	IC UPD28C64C-20
IC31	8-759-725-03	s	IC GAL16V8A-10LP
IC32-35	8-759-243-74	s	IC TC74AC138F
IC36-51	8-752-327-58	s	IC CXK581001M-70L
IC52	8-759-243-78	s	IC TC74AC139F
IC53	8-759-243-06	s	IC TC74AC04F
IC54	8-759-998-41	s	IC MB89394-PF
IC55	8-759-973-34	s	IC RTC-62421B
IC56	8-759-243-74	s	IC TC74AC138F
IC57	8-759-938-75	s	IC MAX232CPE
IC58	8-759-973-43	s	IC MB8421-90LPFQ
IC59	8-759-704-67	s	IC HD647180FS-SIO-V1.0
IC60	8-759-973-43	s	IC MB8421-90LPFQ
IC61	8-759-704-68	s	IC HD647180CP-SIO-V1.0
IC62	8-759-973-43	s	IC MB8421-90LPFQ
IC63	8-759-704-67	s	IC HD647180FS-SIO-V1.0
IC64,65	8-759-926-12	s	IC SN74HC139NS
IC66	8-759-243-06	s	IC TC74AC04F
IC67	8-759-938-75	s	IC MAX232CPE
IC68-70	8-759-008-57	s	IC MC34051P
IC71	8-759-244-10	s	IC TC74AC174F
IC72,73	8-759-938-68	s	IC CXD1095Q
IC74,75	8-759-044-95	s	IC MC14495P
IC76	8-759-244-71	s	IC TC74AC540F
IC77,78	8-759-506-91	s	IC ICL7621BCSA
IC79	8-759-100-96	s	IC UPC4558G2
IC80	8-759-231-93	s	IC TC74HC4051AF
IC81	8-759-505-29	s	IC SM6103S
IC82	8-759-505-00	s	IC CXD8052Q
IC83,84	8-759-945-30	s	IC SN75ALS194N
IC85,86	8-759-505-27	s	IC SN75ALS195J
IC87	8-759-243-90	s	IC TC74AC157F
IC88-95	8-752-327-58	s	IC CXK581001M-70L
IC96	8-759-243-06	s	IC TC74AC04F
IC97	8-759-973-43	s	IC MB8421-90LPFQ
IC98	8-759-704-67	s	IC HD647180FS-SIO-V1.0
IC99	8-759-973-43	s	IC MB8421-90LPFQ
IC100	8-759-704-67	s	IC HD647180FS-SIO-V1.0
IC101	8-759-926-12	s	IC SN74HC139NS
IC102	8-759-008-57	s	IC MC34051P
IC103	8-759-008-57	s	IC MC34051P
IC104	8-759-506-92	s	IC LT1009CZ
IC105	8-759-243-06	s	IC TC74AC04F
IC106	8-759-243-06	s	IC TC74AC04F
IC107	8-759-243-74	s	IC TC74AC138F
L1,2	1-412-031-11	s	INDUCTOR, CHIP 47uH
ND1	8-719-901-68	s	LED GL-6R202, RED
Q1	8-729-205-02	s	TRANSISTOR 2SA1150-Y
RB1	1-231-387-00	s	COMPOSITION CIRCUIT BLOCK
RY1-7	1-515-797-11	s	RELAY
S1,2	1-553-812-00	s	SWITCH, PUSH
S3	1-570-623-11	s	SWITCH, DIP 8-CKT
TH1	1-809-179-11	s	THERMISTOR 102AT-2
X1	1-579-437-11	s	OSCILLATOR, CRYSTAL 66.67MHz

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

(CPU-57 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
X2	1-577-382-11	s	OSCILLATOR, CRYSTAL (IC TYPE) 16.00
X3-7	1-567-812-11	s	RESONATOR, CERAMIC 12.288MHz

SG-153 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-466-A	o	MOUNTED CIRCUIT BOARD, SG-153
2pcs	3-166-184-01	o	LEVER, PC BOARD
6pcs	7-621-773-87	s	SCREW +B 2.6X10
2pcs	7-622-207-05	s	N 2.6, TYPE 2
2pcs	7-626-320-11	s	PIN, SPRING 3X8
2pcs	7-682-648-09	s	SCREW +PS 3X8
8pcs	7-682-948-01	s	SCREW +PSW 3X8
C1,2	1-126-153-11	s	ELECT 22uF 20% 6.3V
C3	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V
C4	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C5	1-163-245-11	s	CERAMIC, CHIP 56pF 5% 50V
C6	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V
C7,8	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C9,10	1-126-153-11	s	ELECT 22uF 20% 6.3V
C11,12	1-163-141-00	s	CERAMIC, CHIP 0.001uF 5% 50V
C13,14	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C15	1-163-124-00	s	CERAMIC, CHIP 200pF 5% 50V
C16	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C17,18	1-126-153-11	s	ELECT 22uF 20% 6.3V
C19-21	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C22	1-163-141-00	s	CERAMIC, CHIP 0.001uF 5% 50V
C23	1-131-347-00	s	TANTALUM 1uF 10% 35V
C24,25	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C26	1-163-141-00	s	CERAMIC, CHIP 0.001uF 5% 50V
C27	1-131-347-00	s	TANTALUM 1uF 10% 35V
C28,29	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C30	1-124-584-00	s	ELECT 100uF 20% 10V
C31	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C32	1-124-584-00	s	ELECT 100uF 20% 10V
C33-66	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C70-85	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C90-94	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C95	1-163-251-11	s	CERAMIC, CHIP 100pF 5% 50V
C100	1-124-584-00	s	ELECT 100uF 20% 10%
C101-103	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C104.105	1-124-584-00	s	ELECT 100uF 20% 10%
C107,108	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C200	1-124-584-00	s	ELECT 100uF 20% 10%
C201-203	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C204,205	1-124-584-00	s	ELECT 100uF 20% 10%
C207,208	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C301-307	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C308-316	1-126-157-11	s	ELECT 10uF 20% 16V
C401-414	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
CN1	1-566-513-11	s	CONNECTOR, FPC (ZIF) 13P
CN2	1-561-310-00	s	CONNECTOR, COAXIAL, MALE
CN3	1-563-322-11	s	CONNECTOR, D-SUB(MOUNT TYPE)25P
CN101	1-569-170-11	o	CONNECTOR, COAXIAL(SMALL TYPE)
CN201	1-569-170-11	o	CONNECTOR, COAXIAL(SMALL TYPE)
CNI40	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI41	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI42	1-526-654-00	s	SOCKET, IC (DP) 16P
CNI43	1-526-654-00	s	SOCKET, IC (DP) 16P
CNI44	1-540-080-11	s	SOCKET, IC (IC113) 68P
CNX1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNY1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

(SG-153 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
CNZ1	1-506-748-11	s	CONNECTOR, DIN 96P, MALE
CV101	1-141-260-00	s	CAP, TRIMMER 50PF
CV201	1-141-260-00	s	CAP, TRIMMER 50PF
D1,2	8-719-800-76	s	DIODE 1SS226
D3,4	8-719-400-35	s	LED LN35BP, GRN
D5,6	8-719-800-76	s	DIODE 1SS226
D300-335	8-719-800-76	s	DIODE 1SS226
F1,2	⚠1-576-031-11	s	FUSE, MICRO 10A
FL101	1-236-174-11	s	FILTER, LOW-PASS
FL201	1-236-174-11	s	FILTER, LOW-PASS
IC1	8-752-015-81	s	IC CX20158
IC2	8-759-925-74	s	IC SN74HC04NS
IC3	8-759-908-92	s	IC TL084CNS
IC4	8-759-230-99	s	IC TC74HC4053AF
IC5	8-759-987-27	s	IC LM1881M
IC6,7	8-759-996-34	s	IC LM360M
IC8	8-759-971-71	s	IC CXD1312Q
IC9	8-752-306-51	s	IC CX23065
IC10	8-759-925-90	s	IC SN74HC74NS
IC12	8-759-927-46	s	IC SN74HC00NS
IC13	8-759-243-06	s	IC TC74AC04F
IC14	8-752-332-67	s	IC CXD1217M
IC17	8-759-205-37	s	IC SN74HC574NS
IC18	8-759-907-81	s	IC SN74LS221NS
IC20,21	8-759-948-40	s	IC DS1000M-50
IC22	8-759-925-74	s	IC SN74HC04NS
IC23	8-759-205-37	s	IC SN74HC574NS
IC25	8-759-244-85	s	IC TC74AC574F
IC26	8-759-244-71	s	IC TC74AC540F
IC27	8-759-244-15	s	IC TC74AC240F
IC28	8-759-925-90	s	IC SN74HC74NS
IC29	8-759-244-15	s	IC TC74AC240F
IC30	8-759-244-71	s	IC TC74AC540F
IC31	8-759-244-85	s	IC TC74AC574F
IC32,33	8-759-323-08	s	IC HM63021FP-28
IC34	8-759-242-51	s	IC TC74AC86F
IC35	8-759-243-06	s	IC TC74AC04F
IC36	8-759-243-39	s	IC TC74AC00F
IC37	8-759-244-04	s	IC TC74AC163F
IC38	8-759-918-40	s	IC CX20194
IC39	8-759-244-85	s	IC TC74AC574F
IC40,41	8-759-749-13	s	IC CY7C291L-35PC
IC42	8-759-785-09	s	IC MB7112L-SYNC-U
IC43	8-759-785-10	s	IC MB7112L-SYNC-L
IC44	8-759-500-28	s	IC CXD8110K
IC45,46	8-759-244-85	s	IC TC74AC574F
IC47-50	8-759-323-08	s	IC HM63021FP-28
IC51,52	8-759-244-85	s	IC TC74AC574F
IC53	8-759-925-84	s	IC SN74HC30NS
IC54	8-759-244-85	s	IC TC74AC574F
IC55	8-759-244-04	s	IC TC74AC163F
IC56	8-759-243-43	s	IC TC74AC02F
IC57	8-759-948-40	s	IC DS1000M-50
IC58	8-759-244-15	s	IC TC74AC240F
IC59	8-759-504-97	s	IC CXD8190Q
IC60	8-759-012-02	s	IC MC10H124M
IC61	8-759-244-85	s	IC TC74AC574F
IC62,63	8-759-926-24	s	IC SN74HC164NS
IC64	8-759-927-46	s	IC SN74HC00NS
IC65,66	8-759-323-08	s	IC HM63021FP-28
IC100	8-752-202-90	s	IC CX22029
IC101	8-752-020-13	s	IC CX20201A-3
IC102	8-759-983-10	s	IC MAX452CSA
IC104	8-759-908-15	s	IC TL431CLP
IC200	8-752-202-90	s	IC CX22029
IC201	8-752-020-11	s	IC CX20201A-1
IC202	8-759-983-10	s	IC MAX452CSA
IC204	8-759-908-15	s	IC TL431CLP
IC301	8-759-505-06	s	IC CXD8058Q
IC302	8-759-505-06	s	IC CXD8058Q
IC303	8-759-244-71	s	IC TC74AC540F
IC304	8-759-244-71	s	IC TC74AC540F
IC305	8-759-244-71	s	IC TC74AC540F
IC306	8-759-244-71	s	IC TC74AC540F
IC307	8-759-244-71	s	IC TC74AC540F
IC401	8-759-505-27	s	IC SN75ALS195J
IC402	8-759-945-30	s	IC SN75ALS194N
IC403	8-759-505-00	s	IC CXD8052Q
IC404	8-759-505-06	s	IC CXD8058Q
IC405	8-759-505-06	s	IC CXD8058Q
IC406	8-759-505-06	s	IC CXD8058Q
IC407	8-759-505-06	s	IC CXD8058Q
IC408	8-759-234-77	s	IC TC4S66F-TE85L
IC409	8-759-720-48	s	IC CAT35C104H
L1,3	1-421-370-00	s	COIL, CHOKE
LV1	1-410-290-11	s	INDUCTOR, VAR 10uH
Q1	8-729-175-72	s	TRANSISTOR 2SC2757-T33
Q2	8-729-112-65	s	TRANSISTOR 2SA1462-Y33
Q201	8-729-112-65	s	TRANSISTOR 2SA1462-Y33
R4	1-216-646-11	s	METAL, CHIP 620 0.5% 1/10W
R5	1-216-117-00	s	METAL 680k 5% 1/10W
R7	1-216-646-11	s	METAL, CHIP 620 0.5% 1/10W
R10	1-216-121-00	s	METAL, CHIP 1M 5% 1/10W
R42-45	1-216-646-11	s	METAL, CHIP 620 0.5% 1/10W
RV4	1-228-458-00	s	RES, ADJ, METAL 5k
RV101	1-228-456-00	s	RES, ADJ, METAL 1k
RV102	1-228-458-00	s	RES, ADJ, METAL 5k
RV201	1-228-456-00	s	RES, ADJ, METAL 1k
RV202	1-228-458-00	s	RES, ADJ, METAL 5k
RY1-36	1-515-797-11	s	RELAY
S1	1-571-146-11	s	SWITCH, ROTARY
TH1	1-809-179-11	s	THERMISTOR 102AT-2
VCO1	1-577-181-11	s	VCO, CRYSTAL 28.64MHz
VCO2	1-577-181-11	s	VCO, CRYSTAL 28.64MHz

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

WKG-5 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-441-A	o	MOUNTED CIRCUIT BOARD, WKG-5
4pcs	1-526-653-21	s	SOCKET, IC (DP) 14P
2pcs	3-166-184-01	o	LEVER, PC BOARD
6pcs	7-621-773-87	s	SCREW +B 2.6X10
2pcs	7-622-207-05	s	N 2.6, TYPE 2
2pcs	7-626-320-11	s	PIN, SPRING 3X8
8pcs	7-682-948-01	s	SCREW +PSW 3X8
C1-12	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C14-24	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C101	1-163-251-11	s	CERAMIC, CHIP 100pF 5% 50V
C200-217	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C300-313	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C315-317	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C400-423	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C428-454	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
CN130	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN131	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN401	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN402	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN403	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CNI200	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI201	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI311	1-526-654-00	s	SOCKET, IC (DP) 16P
CNI312	1-526-654-00	s	SOCKET, IC (DP) 16P
CNI313	1-526-654-00	s	SOCKET, IC (DP) 16P
CNI407	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI417	1-526-660-21	s	SOCKET, IC (DP) 32P
CNI418	1-526-660-21	s	SOCKET, IC (DP) 32P
CNX1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNY1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNZ1	1-506-748-11	s	CONNECTOR, DIN 96P, MALE
D1	8-719-800-76	s	DIODE 1SS226
F1	⚠1-576-031-11	s	FUSE, MICRO 10A
IC1	8-759-234-77	s	IC TC4S66F-TE85L
IC2,3	8-759-244-71	s	IC TC74AC540F
IC4	8-759-505-27	s	IC SN75ALS195J
IC5	8-759-945-30	s	IC SN75ALS194N
IC6,7	8-759-505-00	s	IC CXD8052Q
IC8	8-759-720-48	s	IC CAT35C104H
IC9	8-759-244-75	s	IC TC74AC541F
IC10-12	8-759-505-06	s	IC CXD8058Q
IC14	8-759-244-71	s	IC TC74AC540F
IC15	8-759-244-85	s	IC TC74AC574F
IC16	8-759-927-46	s	IC SN74HC00NS
IC17	8-759-925-90	s	IC SN74HC74NS
IC18	8-759-505-06	s	IC CXD8058Q
IC19	8-759-242-51	s	IC TC74AC86F
IC200	8-759-704-27	s	IC WS57C45-SIN1-V1.0
IC201	8-759-704-28	s	IC WS57C45-SIN2-V1.0
IC202	8-759-504-91	s	IC CXD8062Q
IC203	8-759-505-02	s	IC CXD8053Q
IC204	8-759-505-07	s	IC CXD8059Q
IC205	8-759-504-97	s	IC CXD8190Q
IC206	8-759-505-07	s	IC CXD8059Q
IC207	8-759-504-90	s	IC CXD8063Q
IC208	8-759-504-90	s	IC CXD8063Q
IC209	8-759-504-97	s	IC CXD8190Q
IC210	8-759-504-90	s	IC CXD8063Q
IC211	8-759-504-90	s	IC CXD8063Q
IC212	8-759-504-91	s	IC CXD8062Q
IC213	8-759-505-08	s	IC CXD8060Q
IC214	8-759-320-87	s	IC HM63021P-28
IC215	8-759-320-87	s	IC HM63021P-28
IC300	8-759-244-04	s	IC TC74AC163F
IC301	8-759-926-24	s	IC SN74HC164NS
IC302	8-759-926-24	s	IC SN74HC164NS
IC303	8-759-926-24	s	IC SN74HC164NS
IC304	8-759-926-24	s	IC SN74HC164NS
IC305	8-759-242-51	s	IC TC74AC86F
IC306	8-759-504-91	s	IC CXD8062Q
IC307	8-759-504-91	s	IC CXD8062Q
IC308	8-759-205-37	s	IC SN74HC574NS
IC309	8-759-320-87	s	IC HM63021P-28
IC310	8-759-320-87	s	IC HM63021P-28
IC311	8-759-519-26	s	IC MSM514221A-4RS
IC312	8-759-519-26	s	IC MSM514221A-4RS
IC313	8-759-519-26	s	IC MSM514221A-4RS
IC315	8-759-504-91	s	IC CXD8062Q
IC316	8-759-205-37	s	IC SN74HC574NS
IC317	8-759-504-90	s	IC CXD8063Q
IC400	8-759-926-23	s	IC SN74HC163NS
IC401	8-759-926-23	s	IC SN74HC163NS
IC402	8-759-925-99	s	IC SN74HC109NS
IC403	8-759-925-72	s	IC SN74HC02NS
IC404	8-759-243-39	s	IC TC74AC00F
IC405	8-759-926-23	s	IC SN74HC163NS
IC406	8-759-926-23	s	IC SN74HC163NS
IC407	8-759-704-26	s	IC WS57C45-MSCCNT-V1.0
IC408	8-759-926-23	s	IC SN74HC163NS
IC409	8-759-926-23	s	IC SN74HC163NS
IC410	8-759-242-51	s	IC TC74AC86F
IC411	8-759-242-51	s	IC TC74AC86F
IC412	8-759-242-51	s	IC TC74AC86F
IC413	8-759-243-43	s	IC TC74AC02F
IC414	8-759-926-17	s	IC SN74HC153NS
IC415	8-759-926-17	s	IC SN74HC153NS
IC416	8-759-926-17	s	IC SN74HC153NS
IC417	8-759-551-75	s	IC WS27C010L-UMSC-V1.1
IC418	8-759-551-76	s	IC WS27C010L-LMSC-V1.1
IC419	8-759-205-37	s	IC SN74HC574NS
IC420	8-759-205-37	s	IC SN74HC574NS
IC421	8-759-205-37	s	IC SN74HC574NS
IC422	8-759-205-37	s	IC SN74HC574NS
IC423	8-759-205-37	s	IC SN74HC574NS
IC428	8-759-205-37	s	IC SN74HC574NS
IC429	8-759-205-37	s	IC SN74HC574NS
IC430	8-759-205-37	s	IC SN74HC574NS
IC431	8-759-205-37	s	IC SN74HC574NS
IC432	8-759-205-37	s	IC SN74HC574NS
IC433	8-759-205-37	s	IC SN74HC574NS
IC434	8-759-205-37	s	IC SN74HC574NS
IC435	8-759-504-91	s	IC CXD8062Q
IC436	8-759-504-91	s	IC CXD8062Q

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

(WKG-5 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC437	8-759-504-91	s	IC CXD8062Q
IC438	8-759-244-81	s	IC TC74AC564F
IC439	8-759-244-81	s	IC TC74AC564F
IC440	8-759-244-81	s	IC TC74AC564F
IC441	8-759-244-81	s	IC TC74AC564F
IC442	8-759-244-81	s	IC TC74AC564F
IC443	8-759-244-81	s	IC TC74AC564F
IC444	8-759-013-95	s	IC MC74HC589F
IC445	8-759-013-95	s	IC MC74HC589F
IC446	8-759-013-95	s	IC MC74HC589F
IC447	8-759-013-95	s	IC MC74HC589F
IC448	8-759-013-95	s	IC MC74HC589F
IC449	8-759-013-95	s	IC MC74HC589F
IC450	8-759-925-74	s	IC SN74HC04NS
IC451	8-759-205-37	s	IC SN74HC574NS
IC452	8-759-205-37	s	IC SN74HC574NS
IC453	8-759-205-37	s	IC SN74HC574NS
IC454	8-759-205-37	s	IC SN74HC574NS
TH10	1-809-179-11	s	THERMISTOR 102AT-2

WKG-4 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-442-A	o	MOUNTED CIRCUIT BOARD, WKG-4
2pcs	3-166-184-01	o	LEVER, PC BOARD
6pcs	7-621-773-87	s	SCREW +B 2.6X10
2pcs	7-622-207-05	s	N 2.6, TYPE 2
2pcs	7-626-320-11	s	PIN, SPRING 3X8
8pcs	7-682-948-01	s	SCREW +PSW 3X8
C10-17	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C20-27	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C40-43	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C51-57	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C90	1-163-251-11	s	CERAMIC, CHIP 100pF 5% 50V
C91-95	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C101-118	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C120,121	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C125,126	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C129-140	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C150-174	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C190,191	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C201-218	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C220,221	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C225,226	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C229-240	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C250-274	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C290,291	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
CN101	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN102	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN130	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN131	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN132	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN133	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN134	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN201	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN202	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN230	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN231	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN232	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN233	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN234	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CNI106	1-526-660-21	s	SOCKET, IC (DP) 32P
CNI107	1-526-660-21	s	SOCKET, IC (DP) 32P
CNI115	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI116	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI165	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI166	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI206	1-526-660-21	s	SOCKET, IC (DP) 32P
CNI207	1-526-660-21	s	SOCKET, IC (DP) 32P
CNI215	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI216	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI265	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI266	1-526-816-21	o	SOCKET, IC (DP) 24P
CNX1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNY1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNZ1	1-506-748-11	s	CONNECTOR, DIN 96P, MALE
D10	8-719-800-76	s	DIODE 1SS226

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

(WKG-4 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
F10	⚠1-576-031-11	s	FUSE, MICRO 10A
IC10	8-759-505-27	s	IC SN75ALS195J
IC11	8-759-945-30	s	IC SN75ALS194N
IC12,13	8-759-505-00	s	IC CXD8052Q
IC14	8-759-234-77	s	IC TC4S66F-TE85L
IC15	8-759-720-48	s	IC CAT35C104H
IC16	8-759-243-66	s	IC TC74ACT74F
IC17	8-759-244-06	s	IC TC74AC164F
IC20,21	8-759-244-71	s	IC TC74AC540F
IC22	8-759-244-71	s	IC TC74AC540F
IC23,24	8-759-244-75	s	IC TC74AC541F
IC25	8-759-205-37	s	IC SN74HC574NS
IC26	8-759-244-71	s	IC TC74AC540F
IC27	8-759-243-39	s	IC TC74AC00F
IC40,41	8-759-505-06	s	IC CXD8058Q
IC42	8-759-505-06	s	IC CXD8058Q
IC43	8-759-504-97	s	IC CXD8190Q
IC51	8-759-948-02	s	IC 74F86SJ
IC52	8-759-989-02	s	IC 74F02SJ
IC53	8-752-304-30	s	IC CX23043
IC54	8-759-244-04	s	IC TC74AC163F
IC55	8-759-243-47	s	IC TC74ACT04F
IC56	8-752-304-30	s	IC CX23043
IC57	8-759-244-04	s	IC TC74AC163F
IC101	8-759-245-77	s	IC TC74ACT574F
IC102	8-759-245-77	s	IC TC74ACT574F
IC103	8-759-505-07	s	IC CXD8059Q
IC104	8-759-504-91	s	IC CXD8062Q
IC105	8-759-243-06	s	IC TC74AC04F
IC106	8-759-704-18	s	IC WS27C010L-PAT1-V1.0
IC107	8-759-704-19	s	IC WS27C010L-PAT2-V1.0
IC108	8-759-245-77	s	IC TC74ACT574F
IC109	8-759-245-77	s	IC TC74ACT574F
IC110	8-759-504-90	s	IC CXD8063Q
IC111	8-759-926-82	s	IC SN74HC574ANS
IC112	8-759-926-82	s	IC SN74HC574ANS
IC113	8-759-504-91	s	IC CXD8062Q
IC114	8-759-504-91	s	IC CXD8062Q
IC115	8-759-704-27	s	IC WS57C45-SIN1-V1.0
IC116	8-759-704-28	s	IC WS57C45-SIN2-V1.0
IC117	8-759-504-91	s	IC CXD8062Q
IC118	8-759-505-02	s	IC CXD8053Q
IC120	8-759-243-06	s	IC TC74AC04F
IC121	8-759-243-43	s	IC TC74AC02F
IC129	8-759-505-02	s	IC CXD8053Q
IC130	8-759-505-07	s	IC CXD8059Q
IC131	8-759-504-97	s	IC CXD8190Q
IC132	8-759-505-07	s	IC CXD8059Q
IC133	8-759-504-90	s	IC CXD8063Q
IC134	8-759-504-90	s	IC CXD8063Q
IC135	8-759-504-97	s	IC CXD8190Q
IC136	8-759-504-90	s	IC CXD8063Q
IC137	8-759-504-90	s	IC CXD8063Q
IC138	8-759-504-91	s	IC CXD8062Q
IC139	8-759-505-08	s	IC CXD8060Q
IC140	8-759-243-06	s	IC TC74AC04F
IC150	8-759-926-82	s	IC SN74HC574ANS
IC151	8-759-926-82	s	IC SN74HC574ANS

(WKG-4 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC152	8-759-245-77	s	IC TC74ACT574F
IC153	8-759-245-77	s	IC TC74ACT574F
IC154	8-759-504-91	s	IC CXD8062Q
IC155	8-759-504-91	s	IC CXD8062Q
IC156	8-759-505-31	s	IC MB81C78A-35P-SK
IC157	8-759-505-31	s	IC MB81C78A-35P-SK
IC158	8-759-505-31	s	IC MB81C78A-35P-SK
IC159	8-759-505-31	s	IC MB81C78A-35P-SK
IC160	8-759-504-97	s	IC CXD8190Q
IC161	8-759-927-23	s	IC SN74HCT574ANS
IC162	8-759-927-23	s	IC SN74HCT574ANS
IC163	8-759-504-91	s	IC CXD8062Q
IC164	8-759-504-91	s	IC CXD8062Q
IC165	8-759-704-24	s	IC WS57C49B-REV1-V1.0
IC166	8-759-704-25	s	IC WS57C49B-REV2-V1.0
IC167	8-759-505-09	s	IC CXD8061Q
IC168	8-759-205-37	s	IC SN74HC574NS
IC169	8-759-205-37	s	IC SN74HC574NS
IC170	8-759-244-81	s	IC TC74AC564F
IC171	8-759-244-81	s	IC TC74AC564F
IC172	8-759-013-95	s	IC MC74HC589F
IC173	8-759-013-95	s	IC MC74HC589F
IC174	8-759-243-43	s	IC TC74AC02F
IC201	8-759-245-77	s	IC TC74ACT574F
IC202	8-759-245-77	s	IC TC74ACT574F
IC203	8-759-505-07	s	IC CXD8059Q
IC204	8-759-504-91	s	IC CXD8062Q
IC205	8-759-243-06	s	IC TC74AC04F
IC206	8-759-704-18	s	IC WS27C010L-PAT1-V1.0
IC207	8-759-704-19	s	IC WS27C010L-PAT2-V1.0
IC208	8-759-245-77	s	IC TC74ACT574F
IC209	8-759-245-77	s	IC TC74ACT574F
IC210	8-759-504-90	s	IC CXD8063Q
IC211	8-759-926-82	s	IC SN74HC574ANS
IC212	8-759-926-82	s	IC SN74HC574ANS
IC213	8-759-504-91	s	IC CXD8062Q
IC214	8-759-504-91	s	IC CXD8062Q
IC215	8-759-704-27	s	IC WS57C45-SIN1-V1.0
IC216	8-759-704-28	s	IC WS57C45-SIN2-V1.0
IC217	8-759-504-91	s	IC CXD8062Q
IC218	8-759-505-02	s	IC CXD8053Q
IC220	8-759-243-06	s	IC TC74AC04F
IC221	8-759-243-43	s	IC TC74AC02F
IC229	8-759-505-02	s	IC CXD8053Q
IC230	8-759-505-07	s	IC CXD8059Q
IC231	8-759-504-97	s	IC CXD8190Q
IC232	8-759-505-07	s	IC CXD8059Q
IC233	8-759-504-90	s	IC CXD8063Q
IC234	8-759-504-90	s	IC CXD8063Q
IC235	8-759-504-97	s	IC CXD8190Q
IC236	8-759-504-90	s	IC CXD8063Q
IC237	8-759-504-90	s	IC CXD8063Q
IC238	8-759-504-91	s	IC CXD8062Q
IC239	8-759-505-08	s	IC CXD8060Q
IC240	8-759-243-06	s	IC TC74AC04F
IC250	8-759-926-82	s	IC SN74HC574ANS
IC251	8-759-926-82	s	IC SN74HC574ANS
IC252	8-759-245-77	s	IC TC74ACT574F
IC253	8-759-245-77	s	IC TC74ACT574F

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

(WKG-4 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC254	8-759-504-91	s	IC CXD8062Q
IC255	8-759-504-91	s	IC CXD8062Q
IC256	8-759-505-31	s	IC MB81C78A-35P-SK
IC257	8-759-505-31	s	IC MB81C78A-35P-SK
IC258	8-759-505-31	s	IC MB81C78A-35P-SK
IC259	8-759-505-31	s	IC MB81C78A-35P-SK
IC260	8-759-504-97	s	IC CXD8190Q
IC261	8-759-927-23	s	IC SN74HCT574ANS
IC262	8-759-927-23	s	IC SN74HCT574ANS
IC263	8-759-504-91	s	IC CXD8062Q
IC264	8-759-504-91	s	IC CXD8062Q
IC265	8-759-704-24	s	IC WS57C49B-REV1-V1.0
IC266	8-759-704-25	s	IC WS57C49B-REV2-V1.0
IC267	8-759-505-09	s	IC CXD8061Q
IC268	8-759-926-82	s	IC SN74HC574ANS
IC269	8-759-926-82	s	IC SN74HC574ANS
IC270	8-759-244-81	s	IC TC74AC564F
IC271	8-759-244-81	s	IC TC74AC564F
IC272	8-759-013-95	s	IC MC74HC589F
IC273	8-759-013-95	s	IC MC74HC589F
IC274	8-759-243-43	s	IC TC74AC02F
TH10	1-809-179-11	s	THERMISTOR 102AT-2

KPC-1 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-443-A	o	MOUNTED CIRCUIT BOARD, KPC-1
2pcs	3-166-184-01	o	LEVER, PC BOARD
6pcs	7-621-773-87	s	SCREW +B 2.6X10
2pcs	7-622-207-05	s	N 2.6, TYPE 2
2pcs	7-626-320-11	s	PIN, SPRING 3X8
8pcs	7-682-948-01	s	SCREW +PSW 3X8
C1,2	1-163-251-11	s	CERAMIC, CHIP 100pF 5% 50V
C3-170	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
CN101	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN102	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN110	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CNI113	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI114	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI115	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI116	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI213	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI214	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI215	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI216	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI308	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI309	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI310	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI311	1-526-816-21	o	SOCKET, IC (DP) 24P
CNX1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNY1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNZ1	1-506-748-11	s	CONNECTOR, DIN 96P, MALE
D1	8-719-800-76	s	DIODE 1SS226
F1	⚠1-576-031-11	s	FUSE, MICRO 10A
IC1	8-759-505-27	s	IC SN75ALS195J
IC2	8-759-945-30	s	IC SN75ALS194N
IC3	8-759-505-00	s	IC CXD8052Q
IC4	8-759-720-48	s	IC CAT35C104H
IC5	8-759-234-77	s	IC TC4S66F-TE85L
IC6	8-759-926-11	s	IC SN74HC138NS
IC7	8-759-244-75	s	IC TC74AC541F
IC8	8-759-244-71	s	IC TC74AC540F
IC20	8-759-205-37	s	IC SN74HC574NS
IC21	8-759-243-09	s	IC TC74AC74F
IC22	8-759-320-87	s	IC HM63021P-28
IC30	8-759-244-71	s	IC TC74AC540F
IC31	8-759-244-15	s	IC TC74AC240F
IC32,33	8-759-244-71	s	IC TC74AC540F
IC34	8-759-244-75	s	IC TC74AC541F
IC35	8-759-244-15	s	IC TC74AC240F
IC36	8-759-244-04	s	IC TC74AC163F
IC37	8-759-243-09	s	IC TC74AC74F
IC41	8-759-244-71	s	IC TC74AC540F
IC42	8-759-244-75	s	IC TC74AC541F
IC43	8-759-244-71	s	IC TC74AC540F
IC51-55	8-759-505-06	s	IC CXD8058Q
IC100	8-759-505-02	s	IC CXD8053Q
IC101	8-759-244-75	s	IC TC74AC541F
IC102	8-759-244-75	s	IC TC74AC541F

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

(KPC-1 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC103	8-759-244-75	s	IC TC74AC541F
IC104	8-759-244-75	s	IC TC74AC541F
IC105	8-759-320-87	s	IC HM63021P-28
IC106	8-759-320-87	s	IC HM63021P-28
IC107	8-759-320-87	s	IC HM63021P-28
IC108	8-759-320-87	s	IC HM63021P-28
IC109	8-759-244-06	s	IC TC74AC164F
IC110	8-759-244-06	s	IC TC74AC164F
IC111	8-759-505-05	s	IC CXD8055Q
IC112	8-759-504-99	s	IC CXD8065Q
IC113	8-759-704-29	s	IC WS57C291B-K2U11-V1.0
IC114	8-759-704-30	s	IC WS57C291B-K2L11-V1.0
IC115	8-759-704-22	s	IC WS57C49B-K2U13-V1.0
IC116	8-759-704-23	s	IC WS57C49B-K2L13-V1.0
IC119	8-759-504-98	s	IC CXD8056Q
IC120	8-759-504-98	s	IC CXD8056Q
IC121	8-759-320-87	s	IC HM63021P-28
IC122	8-759-320-87	s	IC HM63021P-28
IC123	8-759-320-87	s	IC HM63021P-28
IC124	8-759-320-87	s	IC HM63021P-28
IC125	8-759-504-98	s	IC CXD8056Q
IC126	8-759-320-87	s	IC HM63021P-28
IC127	8-759-320-87	s	IC HM63021P-28
IC128	8-759-320-87	s	IC HM63021P-28
IC129	8-759-320-87	s	IC HM63021P-28
IC130	8-759-504-98	s	IC CXD8056Q
IC131	8-759-320-87	s	IC HM63021P-28
IC132	8-759-320-87	s	IC HM63021P-28
IC133	8-759-320-87	s	IC HM63021P-28
IC134	8-759-986-36	s	IC 74ACT257SJ
IC135	8-759-504-91	s	IC CXD8062Q
IC136	8-759-244-85	s	IC TC74AC574F
IC137	8-759-244-85	s	IC TC74AC574F
IC138	8-759-244-85	s	IC TC74AC574F
IC139	8-759-244-85	s	IC TC74AC574F
IC140	8-759-013-95	s	IC MC74HC589F
IC141	8-759-013-95	s	IC MC74HC589F
IC142	8-759-013-95	s	IC MC74HC589F
IC143	8-759-013-95	s	IC MC74HC589F
IC144	8-759-244-75	s	IC TC74AC541F
IC145	8-759-244-37	s	IC TC74AC257F
IC146	8-759-243-50	s	IC TC74AC08F
IC147	8-759-243-50	s	IC TC74AC08F
IC148	8-759-243-50	s	IC TC74AC08F
IC200	8-759-505-02	s	IC CXD8053Q
IC201	8-759-244-75	s	IC TC74AC541F
IC202	8-759-244-75	s	IC TC74AC541F
IC203	8-759-244-75	s	IC TC74AC541F
IC204	8-759-244-75	s	IC TC74AC541F
IC205	8-759-320-87	s	IC HM63021P-28
IC206	8-759-320-87	s	IC HM63021P-28
IC207	8-759-320-87	s	IC HM63021P-28
IC208	8-759-320-87	s	IC HM63021P-28
IC209	8-759-244-06	s	IC TC74AC164F
IC210	8-759-244-06	s	IC TC74AC164F
IC211	8-759-505-05	s	IC CXD8055Q
IC212	8-759-504-99	s	IC CXD8065Q
IC213	8-759-704-29	s	IC WS57C291B-K2U11-V1.0
IC214	8-759-704-30	s	IC WS57C291B-K2L11-V1.0

(KPC-1 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC215	8-759-704-22	s	IC WS57C49B-K2U13-V1.0
IC216	8-759-704-23	s	IC WS57C49B-K2L13-V1.0
IC219	8-759-504-98	s	IC CXD8056Q
IC220	8-759-504-98	s	IC CXD8056Q
IC221	8-759-320-87	s	IC HM63021P-28
IC222	8-759-320-87	s	IC HM63021P-28
IC223	8-759-320-87	s	IC HM63021P-28
IC224	8-759-320-87	s	IC HM63021P-28
IC225	8-759-504-98	s	IC CXD8056Q
IC226	8-759-320-87	s	IC HM63021P-28
IC227	8-759-320-87	s	IC HM63021P-28
IC228	8-759-320-87	s	IC HM63021P-28
IC229	8-759-320-87	s	IC HM63021P-28
IC230	8-759-504-98	s	IC CXD8056Q
IC231	8-759-320-87	s	IC HM63021P-28
IC232	8-759-320-87	s	IC HM63021P-28
IC233	8-759-320-87	s	IC HM63021P-28
IC234	8-759-986-36	s	IC 74ACT257SJ
IC235	8-759-504-91	s	IC CXD8062Q
IC236	8-759-244-85	s	IC TC74AC574F
IC237	8-759-244-85	s	IC TC74AC574F
IC238	8-759-244-85	s	IC TC74AC574F
IC239	8-759-244-85	s	IC TC74AC574F
IC240	8-759-013-95	s	IC MC74HC589F
IC241	8-759-013-95	s	IC MC74HC589F
IC242	8-759-013-95	s	IC MC74HC589F
IC243	8-759-013-95	s	IC MC74HC589F
IC244	8-759-244-75	s	IC TC74AC541F
IC245	8-759-244-37	s	IC TC74AC257F
IC246	8-759-243-50	s	IC TC74AC08F
IC247	8-759-243-50	s	IC TC74AC08F
IC248	8-759-243-50	s	IC TC74AC08F
IC300	8-759-518-05	s	IC CXD8300Q
IC301	8-759-518-05	s	IC CXD8300Q
IC302	8-759-518-05	s	IC CXD8300Q
IC303	8-759-518-05	s	IC CXD8300Q
IC304	8-759-518-05	s	IC CXD8300Q
IC305	8-759-320-87	s	IC HM63021P-28
IC306	8-759-320-87	s	IC HM63021P-28
IC307	8-759-504-99	s	IC CXD8065Q
IC308	8-759-704-29	s	IC WS57C291B-K2U11-V1.0
IC309	8-759-704-30	s	IC WS57C291B-K2L11-V1.0
IC310	8-759-704-29	s	IC WS57C291B-K2U11-V1.0
IC311	8-759-704-30	s	IC WS57C291B-K2L11-V1.0
IC312	8-759-244-85	s	IC TC74AC574F
IC313	8-759-244-85	s	IC TC74AC574F
IC314	8-759-244-85	s	IC TC74AC574F
TH1	1-809-179-11	s	THERMISTOR 102AT-2

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

MIX-4 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-444-A	o	MOUNTED CIRCUIT BOARD, MIX-4
2pcs	3-166-184-01	o	LEVER, PC BOARD
6pcs	7-621-773-87	s	SCREW +B 2.6X10
2pcs	7-622-207-05	s	N 2.6, TYPE 2
2pcs	7-626-320-11	s	PIN, SPRING 3X8
8pcs	7-682-948-01	s	SCREW +PSW 3X8
C1,2	1-163-251-11	s	CERAMIC, CHIP 100pF 5% 50V
C3-153	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
CNX1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNY1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNZ1	1-506-748-11	s	CONNECTOR, DIN 96P, MALE
D1	8-719-800-76	s	DIODE 1SS226
F1	⚠1-576-031-11	s	FUSE, MICRO 10A
IC1	8-759-505-27	s	IC SN75ALS195J
IC2	8-759-945-30	s	IC SN75ALS194N
IC3	8-759-505-00	s	IC CXD8052Q
IC4	8-759-720-48	s	IC CAT35C104H
IC5	8-759-234-77	s	IC TC4S66F-TE85L
IC7	8-759-244-75	s	IC TC74AC541F
IC8	8-759-244-71	s	IC TC74AC540F
IC20	8-759-205-37	s	IC SN74HC574NS
IC21	8-759-243-09	s	IC TC74AC74F
IC22	8-759-320-87	s	IC HM63021P-28
IC30	8-759-244-71	s	IC TC74AC540F
IC31	8-759-244-15	s	IC TC74AC240F
IC32,33	8-759-244-71	s	IC TC74AC540F
IC34	8-759-244-75	s	IC TC74AC541F
IC35	8-759-244-15	s	IC TC74AC240F
IC36	8-759-926-23	s	IC SN74HC163ANS
IC37	8-759-243-09	s	IC TC74AC74F
IC51-55	8-759-505-06	s	IC CXD8058Q
IC100	8-759-505-05	s	IC CXD8055Q
IC101	8-759-505-05	s	IC CXD8055Q
IC102	8-759-505-05	s	IC CXD8055Q
IC103	8-759-505-05	s	IC CXD8055Q
IC104	8-759-504-91	s	IC CXD8062Q
IC105	8-759-504-91	s	IC CXD8062Q
IC106	8-759-244-85	s	IC TC74AC574F
IC107	8-759-244-85	s	IC TC74AC574F
IC108	8-759-244-85	s	IC TC74AC574F
IC109	8-759-926-82	s	IC SN74HC574ANS
IC110	8-759-926-82	s	IC SN74HC574ANS
IC111	8-759-926-82	s	IC SN74HC574ANS
IC112	8-759-926-82	s	IC SN74HC574ANS
IC113	8-759-926-82	s	IC SN74HC574ANS
IC114	8-759-320-87	s	IC HM63021P-28
IC115	8-759-320-87	s	IC HM63021P-28
IC116	8-759-320-87	s	IC HM63021P-28
IC117	8-759-320-87	s	IC HM63021P-28
IC118	8-759-320-87	s	IC HM63021P-28
IC119	8-759-320-87	s	IC HM63021P-28
IC120	8-759-320-87	s	IC HM63021P-28
IC121	8-759-320-87	s	IC HM63021P-28
IC122	8-759-320-87	s	IC HM63021P-28

(MIX-4 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC123	8-759-320-87	s	IC HM63021P-28
IC124	8-759-320-87	s	IC HM63021P-28
IC125	8-759-320-87	s	IC HM63021P-28
IC200	8-759-505-05	s	IC CXD8055Q
IC201	8-759-505-05	s	IC CXD8055Q
IC202	8-759-505-05	s	IC CXD8055Q
IC203	8-759-505-05	s	IC CXD8055Q
IC204	8-759-504-91	s	IC CXD8062Q
IC205	8-759-504-91	s	IC CXD8062Q
IC206	8-759-244-85	s	IC TC74AC574F
IC207	8-759-244-85	s	IC TC74AC574F
IC208	8-759-244-85	s	IC TC74AC574F
IC209	8-759-926-82	s	IC SN74HC574ANS
IC210	8-759-926-82	s	IC SN74HC574ANS
IC211	8-759-926-82	s	IC SN74HC574ANS
IC212	8-759-926-82	s	IC SN74HC574ANS
IC213	8-759-926-82	s	IC SN74HC574ANS
IC214	8-759-320-87	s	IC HM63021P-28
IC215	8-759-320-87	s	IC HM63021P-28
IC216	8-759-320-87	s	IC HM63021P-28
IC217	8-759-320-87	s	IC HM63021P-28
IC218	8-759-320-87	s	IC HM63021P-28
IC219	8-759-320-87	s	IC HM63021P-28
IC220	8-759-320-87	s	IC HM63021P-28
IC221	8-759-320-87	s	IC HM63021P-28
IC222	8-759-320-87	s	IC HM63021P-28
IC223	8-759-320-87	s	IC HM63021P-28
IC224	8-759-320-87	s	IC HM63021P-28
IC225	8-759-320-87	s	IC HM63021P-28
IC300	8-759-505-05	s	IC CXD8055Q
IC302	8-759-505-05	s	IC CXD8055Q
IC306	8-759-244-85	s	IC TC74AC574F
IC307	8-759-244-85	s	IC TC74AC574F
IC308	8-759-244-85	s	IC TC74AC574F
IC309	8-759-926-82	s	IC SN74HC574ANS
IC310	8-759-926-82	s	IC SN74HC574ANS
IC311	8-759-926-82	s	IC SN74HC574ANS
IC312	8-759-926-82	s	IC SN74HC574ANS
IC313	8-759-926-82	s	IC SN74HC574ANS
IC314	8-759-244-85	s	IC TC74AC574F
IC320	8-759-504-97	s	IC CXD8190Q
IC321	8-759-504-97	s	IC CXD8190Q
IC322	8-759-320-87	s	IC HM63021P-28
IC323	8-759-320-87	s	IC HM63021P-28
IC324	8-759-320-87	s	IC HM63021P-28
IC325	8-759-320-87	s	IC HM63021P-28
IC326	8-759-320-87	s	IC HM63021P-28
IC327	8-759-320-87	s	IC HM63021P-28
IC328	8-759-320-87	s	IC HM63021P-28
IC329	8-759-320-87	s	IC HM63021P-28
IC330	8-759-505-03	s	IC CXD8066G
IC331	8-759-505-03	s	IC CXD8066G
IC332	8-759-505-04	s	IC CXD8067G
IC333	8-759-505-04	s	IC CXD8067G
IC334	8-759-505-03	s	IC CXD8066G
IC335	8-759-505-03	s	IC CXD8066G
IC336	8-759-505-04	s	IC CXD8067G
IC337	8-759-505-04	s	IC CXD8067G
IC338	8-759-504-97	s	IC CXD8190Q

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

(MIX-4 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC339	8-759-948-31	s	IC CXD1319AQ
IC341	8-759-948-31	s	IC CXD1319AQ
IC342	8-759-244-85	s	IC TC74AC574F
IC343	8-759-244-85	s	IC TC74AC574F
IC344	8-759-244-85	s	IC TC74AC574F
TH1	1-809-179-11	s	THERMISTOR 102AT-2

MIX-6 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-445-A	o	MOUNTED CIRCUIT BOARD, MIX-6
2pcs	3-166-184-01	o	LEVER, PC BOARD
6pcs	7-621-773-87	s	SCREW +B 2.6X10
2pcs	7-622-207-05	s	N 2.6, TYPE 2
2pcs	7-626-320-11	s	PIN, SPRING 3X8
8pcs	7-682-948-01	s	SCREW +PSW 3X8
C1,2	1-163-251-11	s	CERAMIC, CHIP 100pF 5% 50V
C3-143	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C145-151	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C154-181	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
CN100	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN110	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CNI113	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI114	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI115	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI116	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI308	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI309	1-526-816-21	o	SOCKET, IC (DP) 24P
CNX1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNY1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNZ1	1-506-748-11	s	CONNECTOR, DIN 96P, MALE
D1	8-719-800-76	s	DIODE 1SS226
F1	⚠1-576-031-11	s	FUSE, MICRO 10A
IC1	8-759-505-27	s	IC SN75ALS195J
IC2	8-759-945-30	s	IC SN75ALS194N
IC3	8-759-505-00	s	IC CXD8052Q
IC4	8-759-720-48	s	IC CAT35C104H
IC5	8-759-234-77	s	IC TC4S66F-TE85L
IC6	8-759-926-11	s	IC SN74HC138NS
IC7	8-759-244-75	s	IC TC74AC541F
IC8	8-759-244-71	s	IC TC74AC540F
IC9	8-759-244-75	s	IC TC74AC541F
IC20	8-759-205-37	s	IC SN74HC574NS
IC21	8-759-243-09	s	IC TC74AC74F
IC22	8-759-320-87	s	IC HM63021P-28
IC30	8-759-244-71	s	IC TC74AC540F
IC31	8-759-244-15	s	IC TC74AC240F
IC32	8-759-244-71	s	IC TC74AC540F
IC33,34	8-759-244-71	s	IC TC74AC540F
IC35	8-759-244-75	s	IC TC74AC541F
IC36	8-759-926-23	s	IC SN74HC163ANS
IC37	8-759-243-09	s	IC TC74AC74F
IC38	8-759-244-15	s	IC TC74AC240F
IC39	8-759-244-75	s	IC TC74AC541F
IC51-58	8-759-505-06	s	IC CXD8058Q
IC100	8-759-505-02	s	IC CXD8053Q
IC101	8-759-244-75	s	IC TC74AC541F
IC102	8-759-244-75	s	IC TC74AC541F
IC103	8-759-244-75	s	IC TC74AC541F
IC104	8-759-244-75	s	IC TC74AC541F
IC105	8-759-320-87	s	IC HM63021P-28
IC106	8-759-320-87	s	IC HM63021P-28
IC107	8-759-320-87	s	IC HM63021P-28

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

(MIX-6 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC108	8-759-320-87	s	IC HM63021P-28
IC109	8-759-244-06	s	IC TC74AC164F
IC110	8-759-244-06	s	IC TC74AC164F
IC111	8-759-505-05	s	IC CXD8055Q
IC112	8-759-504-99	s	IC CXD8065Q
IC113	8-759-704-29	s	IC WS57C291B-K2U11-V1.0
IC114	8-759-704-30	s	IC WS57C291B-K2L11-V1.0
IC115	8-759-704-22	s	IC WS57C49B-K2U13-V1.0
IC116	8-759-704-23	s	IC WS57C49B-K2L13-V1.0
IC119	8-759-504-98	s	IC CXD8056Q
IC120	8-759-504-98	s	IC CXD8056Q
IC121	8-759-320-87	s	IC HM63021P-28
IC122	8-759-320-87	s	IC HM63021P-28
IC123	8-759-320-87	s	IC HM63021P-28
IC124	8-759-320-87	s	IC HM63021P-28
IC125	8-759-504-98	s	IC CXD8056Q
IC126	8-759-320-87	s	IC HM63021P-28
IC127	8-759-320-87	s	IC HM63021P-28
IC128	8-759-320-87	s	IC HM63021P-28
IC129	8-759-320-87	s	IC HM63021P-28
IC130	8-759-504-98	s	IC CXD8056Q
IC131	8-759-320-87	s	IC HM63021P-28
IC132	8-759-320-87	s	IC HM63021P-28
IC133	8-759-320-87	s	IC HM63021P-28
IC134	8-759-986-36	s	IC 74ACT257SJ
IC135	8-759-504-91	s	IC CXD8062Q
IC136	8-759-504-91	s	IC CXD8062Q
IC138	8-759-244-37	s	IC TC74AC257F
IC139	8-759-504-91	s	IC CXD8062Q
IC140	8-759-504-91	s	IC CXD8062Q
IC141	8-759-505-05	s	IC CXD8055Q
IC142	8-759-505-05	s	IC CXD8055Q
IC143	8-759-243-50	s	IC TC74AC08F
IC144	8-759-243-50	s	IC TC74AC08F
IC145	8-759-243-50	s	IC TC74AC08F
IC146	8-759-505-05	s	IC CXD8055Q
IC147	8-759-505-05	s	IC CXD8055Q
IC148	8-759-926-82	s	IC SN74HC574ANS
IC149	8-759-926-82	s	IC SN74HC574ANS
IC150	8-759-926-82	s	IC SN74HC574ANS
IC151	8-759-320-87	s	IC HM63021P-28
IC152	8-759-320-87	s	IC HM63021P-28
IC153	8-759-320-87	s	IC HM63021P-28
IC155	8-759-320-87	s	IC HM63021P-28
IC156	8-759-320-87	s	IC HM63021P-28
IC157	8-759-320-87	s	IC HM63021P-28
IC158	8-759-320-87	s	IC HM63021P-28
IC159	8-759-320-87	s	IC HM63021P-28
IC160	8-759-320-87	s	IC HM63021P-28
IC161	8-759-320-87	s	IC HM63021P-28
IC162	8-759-320-87	s	IC HM63021P-28
IC163	8-759-244-75	s	IC TC74AC541F
IC300	8-759-518-05	s	IC CXD8300Q
IC301	8-759-518-05	s	IC CXD8300Q
IC302	8-759-518-05	s	IC CXD8300Q
IC303	8-759-504-97	s	IC CXD8190Q
IC304	8-759-504-97	s	IC CXD8190Q
IC305	8-759-320-87	s	IC HM63021P-28
IC306	8-759-320-87	s	IC HM63021P-28

(MIX-6 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC307	8-759-504-99	s	IC CXD8065Q
IC308	8-759-704-29	s	IC WS57C291B-K2U11-V1.0
IC309	8-759-704-30	s	IC WS57C291B-K2L11-V1.0
IC310	8-759-505-05	s	IC CXD8055Q
IC311	8-759-926-82	s	IC SN74HC574ANS
IC312	8-759-926-82	s	IC SN74HC574ANS
IC313	8-759-926-82	s	IC SN74HC574ANS
IC314	8-759-926-82	s	IC SN74HC574ANS
IC315	8-759-320-87	s	IC HM63021P-28
IC316	8-759-320-87	s	IC HM63021P-28
IC317	8-759-320-87	s	IC HM63021P-28
IC318	8-759-320-87	s	IC HM63021P-28
IC319	8-759-320-87	s	IC HM63021P-28
IC320	8-759-320-87	s	IC HM63021P-28
IC321	8-759-320-87	s	IC HM63021P-28
IC322	8-759-320-87	s	IC HM63021P-28
IC323	8-759-504-97	s	IC CXD8190Q
IC324	8-759-243-62	s	IC TC74AC32F
IC325	8-759-986-36	s	IC 74ACT257SJ
IC326	8-759-986-36	s	IC 74ACT257SJ
IC327	8-759-986-36	s	IC 74ACT257SJ
IC328	8-759-986-36	s	IC 74ACT257SJ
IC329	8-759-986-36	s	IC 74ACT257SJ
IC330	8-759-986-36	s	IC 74ACT257SJ
IC331	8-759-986-36	s	IC 74ACT257SJ
IC332	8-759-986-36	s	IC 74ACT257SJ
IC333	8-759-986-36	s	IC 74ACT257SJ
IC334	8-759-986-36	s	IC 74ACT257SJ
IC335	8-759-986-36	s	IC 74ACT257SJ
IC336	8-759-986-36	s	IC 74ACT257SJ
IC337	8-759-504-91	s	IC CXD8062Q
IC338	8-759-504-91	s	IC CXD8062Q
IC339	8-759-504-97	s	IC CXD8190Q
IC340	8-759-504-97	s	IC CXD8190Q
IC341	8-759-504-91	s	IC CXD8062Q
IC342	8-759-504-91	s	IC CXD8062Q
IC343	8-759-504-91	s	IC CXD8062Q
IC344	8-759-504-91	s	IC CXD8062Q
IC345	8-759-243-62	s	IC TC74AC32F
IC346	8-759-243-62	s	IC TC74AC32F
IC347	8-759-243-62	s	IC TC74AC32F
IC348	8-759-243-62	s	IC TC74AC32F
IC349	8-759-504-91	s	IC CXD8062Q
IC350	8-759-504-91	s	IC CXD8062Q
IC351	8-759-504-91	s	IC CXD8062Q
IC352	8-759-504-91	s	IC CXD8062Q
IC353	8-759-504-91	s	IC CXD8062Q
IC354	8-759-504-91	s	IC CXD8062Q
IC355	8-759-504-91	s	IC CXD8062Q
IC356	8-759-504-91	s	IC CXD8062Q
IC357	8-759-948-31	s	IC CXD1319AQ
IC358	8-759-948-31	s	IC CXD1319AQ
IC359	8-759-504-91	s	IC CXD8062Q
IC360	8-759-504-91	s	IC CXD8062Q
IC361	8-759-504-95	s	IC CXD8026Q
IC362	8-759-504-95	s	IC CXD8026Q
IC363	8-759-948-31	s	IC CXD1319AQ
IC364	8-759-948-31	s	IC CXD1319AQ
IC365	8-759-948-31	s	IC CXD1319AQ

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

(MIX-6 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC366	8-759-948-31	s	IC CXD1319AQ
IC367	8-759-504-91	s	IC CXD8062Q
IC368	8-759-504-91	s	IC CXD8062Q
IC369	8-759-505-02	s	IC CXD8053Q
IC370	8-759-505-02	s	IC CXD8053Q
IC371	8-759-504-97	s	IC CXD8190Q
IC372	8-759-504-97	s	IC CXD8190Q
IC373	8-759-244-85	s	IC TC74AC574F
IC374	8-759-244-85	s	IC TC74AC574F
IC375	8-759-244-85	s	IC TC74AC574F
IC376	8-759-244-85	s	IC TC74AC574F
IC377	8-759-244-85	s	IC TC74AC574F
TH1	1-809-179-11	s	THERMISTOR 102AT-2

OUT-1 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-446-A	o	MOUNTED CIRCUIT BOARD, OUT-1
2pcs	3-166-184-01	o	LEVER, PC BOARD
6pcs	7-621-773-87	s	SCREW +B 2.6X10
2pcs	7-622-207-05	s	N 2.6, TYPE 2
2pcs	7-626-320-11	s	PIN, SPRING 3X8
8pcs	7-682-948-01	s	SCREW +PSW 3X8
C1-3	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C6-28	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C121-123	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C124	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C125	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V
C126,127	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C128	1-163-127-00	s	CERAMIC, CHIP 270pF 5% 50V
C131-134	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C135	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C136-139	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C141-143	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C144	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C145	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V
C146,147	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C148	1-163-127-00	s	CERAMIC, CHIP 270pF 5% 50V
C151-154	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C155	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C156-159	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C161-163	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C164	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C165	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V
C166,167	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C168	1-163-127-00	s	CERAMIC, CHIP 270pF 5% 50V
C171-174	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C175	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C176-179	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C181-183	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C184	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C185	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V
C186,187	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C188	1-163-127-00	s	CERAMIC, CHIP 270pF 5% 50V
C191-194	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C195	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C196-199	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C201-203	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C204	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C205	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V
C206,207	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C208	1-163-127-00	s	CERAMIC, CHIP 270pF 5% 50V
C211-219	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C222-224	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C241-243	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C244	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C245	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V
C246,247	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C248	1-163-127-00	s	CERAMIC, CHIP 270pF 5% 50V
C251-254	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C255	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C256-259	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C261-263	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C264	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C265	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V

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(OUT-1 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C266,267	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C268	1-163-127-00	s	CERAMIC, CHIP 270pF 5% 50V
C271-274	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C275	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C276-279	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C281-283	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C284	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C285	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V
C286,287	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C288	1-163-127-00	s	CERAMIC, CHIP 270pF 5% 50V
C291-294	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C295	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C296-299	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C301-303	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C304	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C305	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V
C306,307	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C308	1-163-127-00	s	CERAMIC, CHIP 270pF 5% 50V
C311-314	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C315	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C316-319	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C321-323	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C324	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C325	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V
C326,327	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C328	1-163-127-00	s	CERAMIC, CHIP 270pF 5% 50V
C331-334	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C335	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C336-339	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C341-343	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C344	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C345	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V
C346,347	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C348	1-163-127-00	s	CERAMIC, CHIP 270pF 5% 50V
C351-354	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C355	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C356-359	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C361-363	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C364	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C365	1-163-121-00	s	CERAMIC, CHIP 150pF 5% 50V
C366,367	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C368	1-163-127-00	s	CERAMIC, CHIP 270pF 5% 50V
C371-374	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C375	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C376-379	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C401-439	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C501-504	1-124-566-11	s	ELECT 120uF 20% 6.3V
C505-508	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C509,510	1-163-251-11	s	CERAMIC, CHIP 100pF 5% 50V
C511	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C600	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
CNX1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNY1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNZ1	1-506-748-11	s	CONNECTOR, DIN 96P, MALE
D450	8-719-800-76	s	DIODE 1SS226
D451	8-719-800-76	s	DIODE 1SS226

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(OUT-1 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
F450	⚠1-576-031-11	s	FUSE, MICRO 10A
F451	⚠1-576-031-11	s	FUSE, MICRO 10A
IC1-3	8-759-244-85	s	IC TC74AC574F
IC6-24	8-759-244-85	s	IC TC74AC574F
IC25,26	8-759-504-95	s	IC CXD8026Q
IC27	8-759-243-06	s	IC TC74AC04F
IC28	8-759-244-85	s	IC TC74AC574F
IC121	8-759-320-87	s	IC HM63021P-28
IC122	8-759-320-87	s	IC HM63021P-28
IC123	8-759-511-55	s	IC CXD8189AQ
IC126	8-741-601-11	s	IC SBX1601A
IC141	8-759-320-87	s	IC HM63021P-28
IC142	8-759-320-87	s	IC HM63021P-28
IC143	8-759-511-55	s	IC CXD8189AQ
IC146	8-741-601-11	s	IC SBX1601A
IC161	8-759-320-87	s	IC HM63021P-28
IC162	8-759-320-87	s	IC HM63021P-28
IC163	8-759-511-55	s	IC CXD8189AQ
IC166	8-741-601-11	s	IC SBX1601A
IC181	8-759-320-87	s	IC HM63021P-28
IC182	8-759-320-87	s	IC HM63021P-28
IC183	8-759-511-55	s	IC CXD8189AQ
IC186	8-741-601-11	s	IC SBX1601A
IC201	8-759-320-87	s	IC HM63021P-28
IC202	8-759-320-87	s	IC HM63021P-28
IC203	8-759-511-55	s	IC CXD8189AQ
IC206	8-741-601-11	s	IC SBX1601A
IC207	8-752-050-69	s	IC CXA1389AQ
IC241	8-759-320-87	s	IC HM63021P-28
IC242	8-759-320-87	s	IC HM63021P-28
IC243	8-759-511-55	s	IC CXD8189AQ
IC246	8-741-601-11	s	IC SBX1601A
IC261	8-759-320-87	s	IC HM63021P-28
IC262	8-759-320-87	s	IC HM63021P-28
IC263	8-759-511-55	s	IC CXD8189AQ
IC266	8-741-601-11	s	IC SBX1601A
IC281	8-759-320-87	s	IC HM63021P-28
IC282	8-759-320-87	s	IC HM63021P-28
IC283	8-759-511-55	s	IC CXD8189AQ
IC286	8-741-601-11	s	IC SBX1601A
IC301	8-759-320-87	s	IC HM63021P-28
IC302	8-759-320-87	s	IC HM63021P-28
IC303	8-759-511-55	s	IC CXD8189AQ
IC306	8-741-601-11	s	IC SBX1601A
IC321	8-759-320-87	s	IC HM63021P-28
IC322	8-759-320-87	s	IC HM63021P-28
IC323	8-759-511-55	s	IC CXD8189AQ
IC326	8-741-601-11	s	IC SBX1601A
IC341	8-759-320-87	s	IC HM63021P-28
IC342	8-759-320-87	s	IC HM63021P-28
IC343	8-759-511-55	s	IC CXD8189AQ
IC346	8-741-601-11	s	IC SBX1601A
IC361	8-759-320-87	s	IC HM63021P-28
IC362	8-759-320-87	s	IC HM63021P-28
IC363	8-759-511-55	s	IC CXD8189AQ
IC366	8-741-601-11	s	IC SBX1601A
IC401	8-759-505-00	s	IC CXD8052Q

(OUT-1 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC402	8-759-505-27	s	IC SN75ALS195J
IC403	8-759-945-30	s	IC SN75ALS194N
IC404	8-759-720-48	s	IC CAT35C104H
IC405	8-759-234-77	s	IC TC4S66F-TE85L
IC406	8-759-244-71	s	IC TC74AC540F
IC407	8-759-244-71	s	IC TC74AC540F
IC408	8-759-244-71	s	IC TC74AC540F
IC409	8-759-244-71	s	IC TC74AC540F
IC410	8-759-244-75	s	IC TC74AC541F
IC411	8-759-505-06	s	IC CXD8058Q
IC412	8-759-505-06	s	IC CXD8058Q
IC413	8-759-505-06	s	IC CXD8058Q
IC414	8-759-505-06	s	IC CXD8058Q
IC415	8-759-505-06	s	IC CXD8058Q
IC416	8-759-244-85	s	IC TC74AC574F
IC417	8-759-244-85	s	IC TC74AC574F
IC418	8-759-244-85	s	IC TC74AC574F
IC419	8-759-245-77	s	IC TC74ACT574F
IC420	8-759-245-77	s	IC TC74ACT574F
IC421	8-759-245-77	s	IC TC74ACT574F
IC422	8-759-320-87	s	IC HM63021P-28
IC423	8-759-320-87	s	IC HM63021P-28
IC424	8-759-320-87	s	IC HM63021P-28
IC425	8-759-320-87	s	IC HM63021P-28
IC426	8-759-013-95	s	IC MC74HC589F
IC427	8-759-013-95	s	IC MC74HC589F
IC428	8-759-032-59	s	IC MC74HC595AF
IC429	8-759-032-59	s	IC MC74HC595AF
IC430	8-759-994-64	s	IC MB88341PF
IC431	8-759-948-40	s	IC DS1000M-50
IC432	8-759-012-13	s	IC MC10H125M
IC433	8-759-012-13	s	IC MC10H125M
IC434	8-759-012-13	s	IC MC10H125M
IC435	8-759-926-50	s	IC SN74HC251NS
IC436	8-759-926-50	s	IC SN74HC251NS
L1,2	1-421-370-00	s	COIL, CHOKE
L121	1-410-358-41	s	INDUCTOR, MICRO 0.39uH
L122	1-410-312-11	s	INDUCTOR 0.22uH
L123	1-412-026-11	s	INDUCTOR, CHIP 1uH
L141	1-410-358-41	s	INDUCTOR, MICRO 0.39uH
L142	1-410-312-11	s	INDUCTOR 0.22uH
L143	1-412-026-11	s	INDUCTOR, CHIP 1uH
L161	1-410-358-41	s	INDUCTOR, MICRO 0.39uH
L162	1-410-312-11	s	INDUCTOR 0.22uH
L163	1-412-026-11	s	INDUCTOR, CHIP 1uH
L181	1-410-358-41	s	INDUCTOR, MICRO 0.39uH
L182	1-410-312-11	s	INDUCTOR 0.22uH
L183	1-412-026-11	s	INDUCTOR, CHIP 1uH
L201	1-410-358-41	s	INDUCTOR, MICRO 0.39uH
L202	1-410-312-11	s	INDUCTOR 0.22uH
L203	1-412-026-11	s	INDUCTOR, CHIP 1uH
L241	1-410-358-41	s	INDUCTOR, MICRO 0.39uH
L242	1-410-312-11	s	INDUCTOR 0.22uH
L243	1-412-026-11	s	INDUCTOR, CHIP 1uH
L261	1-410-358-41	s	INDUCTOR, MICRO 0.39uH
L262	1-410-312-11	s	INDUCTOR 0.22uH
L263	1-412-026-11	s	INDUCTOR, CHIP 1uH
L281	1-410-358-41	s	INDUCTOR, MICRO 0.39uH
L282	1-410-312-11	s	INDUCTOR 0.22uH

(OUT-1 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
L283	1-412-026-11	s	INDUCTOR, CHIP 1uH
L301	1-410-358-41	s	INDUCTOR, MICRO 0.39uH
L302	1-410-312-11	s	INDUCTOR 0.22uH
L303	1-412-026-11	s	INDUCTOR, CHIP 1uH
L321	1-410-358-41	s	INDUCTOR, MICRO 0.39uH
L322	1-410-312-11	s	INDUCTOR 0.22uH
L323	1-412-026-11	s	INDUCTOR, CHIP 1uH
L341	1-410-358-41	s	INDUCTOR, MICRO 0.39uH
L342	1-410-312-11	s	INDUCTOR 0.22uH
L343	1-412-026-11	s	INDUCTOR, CHIP 1uH
L361	1-410-358-41	s	INDUCTOR, MICRO 0.39uH
L362	1-410-312-11	s	INDUCTOR 0.22uH
L363	1-412-026-11	s	INDUCTOR, CHIP 1uH
Q121	8-729-216-22	s	TRANSISTOR 2SA1162
Q122	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q123	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q124	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q125	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q141	8-729-216-22	s	TRANSISTOR 2SA1162
Q142	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q143	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q144	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q145	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q161	8-729-216-22	s	TRANSISTOR 2SA1162
Q162	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q163	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q164	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q165	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q181	8-729-216-22	s	TRANSISTOR 2SA1162
Q182	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q183	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q184	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q185	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q201	8-729-216-22	s	TRANSISTOR 2SA1162
Q204	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q205	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q241	8-729-216-22	s	TRANSISTOR 2SA1162
Q242	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q243	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q244	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q245	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q261	8-729-216-22	s	TRANSISTOR 2SA1162
Q262	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q263	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q264	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q265	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q281	8-729-216-22	s	TRANSISTOR 2SA1162
Q282	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q283	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q284	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q285	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q301	8-729-216-22	s	TRANSISTOR 2SA1162
Q302	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q303	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q304	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q305	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q321	8-729-216-22	s	TRANSISTOR 2SA1162
Q322	8-729-143-46	s	TRANSISTOR 2SC3356-R24

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

(OUT-1 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
Q323	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q324	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q325	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q341	8-729-216-22	s	TRANSISTOR 2SA1162
Q342	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q343	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q344	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q345	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q361	8-729-216-22	s	TRANSISTOR 2SA1162
Q362	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q363	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q364	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q365	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q401	8-729-216-22	s	TRANSISTOR 2SA1162
R133,134	1-216-615-11	s	METAL, CHIP 33 0.5% 1/10W
R139	1-216-630-11	s	METAL, CHIP 130 0.5% 1/10W
R153,154	1-216-615-11	s	METAL, CHIP 33 0.5% 1/10W
R159	1-216-630-11	s	METAL, CHIP 130 0.5% 1/10W
R173,174	1-216-615-11	s	METAL, CHIP 33 0.5% 1/10W
R179	1-216-630-11	s	METAL, CHIP 130 0.5% 1/10W
R193,194	1-216-615-11	s	METAL, CHIP 33 0.5% 1/10W
R199	1-216-630-11	s	METAL, CHIP 130 0.5% 1/10W
R253,254	1-216-615-11	s	METAL, CHIP 33 0.5% 1/10W
R259	1-216-630-11	s	METAL, CHIP 130 0.5% 1/10W
R273,274	1-216-615-11	s	METAL, CHIP 33 0.5% 1/10W
R279	1-216-630-11	s	METAL, CHIP 130 0.5% 1/10W
R293,294	1-216-615-11	s	METAL, CHIP 33 0.5% 1/10W
R299	1-216-630-11	s	METAL, CHIP 130 0.5% 1/10W
R313,314	1-216-615-11	s	METAL, CHIP 33 0.5% 1/10W
R319	1-216-630-11	s	METAL, CHIP 130 0.5% 1/10W
R333,334	1-216-615-11	s	METAL, CHIP 33 0.5% 1/10W
R339	1-216-630-11	s	METAL, CHIP 130 0.5% 1/10W
R353,354	1-216-615-11	s	METAL, CHIP 33 0.5% 1/10W
R359	1-216-630-11	s	METAL, CHIP 130 0.5% 1/10W
R373,374	1-216-615-11	s	METAL, CHIP 33 0.5% 1/10W
R379	1-216-630-11	s	METAL, CHIP 130 0.5% 1/10W
TH1	1-809-179-11	s	THERMISTOR 102AT-2

MAT-1 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-447-A	o	MOUNTED CIRCUIT BOARD, MAT-1
2pcs	3-166-184-01	o	LEVER, PC BOARD
6pcs	7-621-773-87	s	SCREW +B 2.6X10
2pcs	7-622-207-05	s	N 2.6, TYPE 2
2pcs	7-626-320-11	s	PIN, SPRING 3X8
8pcs	7-682-948-01	s	SCREW +PSW 3X8
C1	1-163-251-11	s	CERAMIC, CHIP 100pF 5% 50V
C2-23	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C101-123	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C128	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C201-213	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C216-218	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C220	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C222-228	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C304-309	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C320-331	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C401-405	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
CN101	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN102	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN103	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN201	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN202	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CN203	1-580-365-11	o	CONNECTOR, FPC (DIP TYPE) 13P
CNI101	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI102	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI114	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI115	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI116	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI117	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI201	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI202	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI216	1-526-816-21	o	SOCKET, IC (DP) 24P
CNI217	1-526-816-21	o	SOCKET, IC (DP) 24P
CNX1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNY1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNZ1	1-506-748-11	s	CONNECTOR, DIN 96P, MALE
D1	8-719-800-76	s	DIODE 1SS226
F1	⚠1-576-031-11	s	FUSE, MICRO 10A
IC2	8-759-505-27	s	IC SN75ALS195J
IC3	8-759-945-30	s	IC SN75ALS194N
IC4,5	8-759-505-00	s	IC CXD8052Q
IC6	8-759-720-48	s	IC CAT35C104H
IC7,8	8-759-505-06	s	IC CXD8058Q
IC9	8-759-244-71	s	IC TC74AC540F
IC10	8-759-244-71	s	IC TC74AC540F
IC11	8-759-505-00	s	IC CXD8052Q
IC12	8-759-244-12	s	IC TC74AC175F
IC13,14	8-759-244-75	s	IC TC74AC541F
IC15,16	8-759-244-71	s	IC TC74AC540F
IC17	8-759-205-37	s	IC SN74HC574NS
IC18	8-759-926-76	s	IC SN74HC540NS
IC19	8-759-927-46	s	IC SN74HC00NS
IC20	8-759-234-77	s	IC TC4S66F-TE85L

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

(MAT-1 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC21	8-759-925-74	s	IC SN74HC04NS
IC22	8-759-945-30	s	IC SN75ALS194N
IC23	8-759-925-97	s	IC SN74HC86ANS
IC101	8-759-704-27	s	IC WS57C45-SIN1-V1.0
IC102	8-759-704-28	s	IC WS57C45-SIN2-V1.0
IC103	8-759-504-91	s	IC CXD8062Q
IC104	8-759-505-02	s	IC CXD8053Q
IC105	8-759-505-07	s	IC CXD8059Q
IC106	8-759-505-07	s	IC CXD8059Q
IC107	8-759-504-90	s	IC CXD8063Q
IC108	8-759-504-90	s	IC CXD8063Q
IC109	8-759-504-97	s	IC CXD8190Q
IC110	8-759-504-91	s	IC CXD8062Q
IC111	8-759-505-08	s	IC CXD8060Q
IC112	8-759-504-99	s	IC CXD8065Q
IC113	8-759-504-98	s	IC CXD8056Q
IC114	8-759-704-31	s	IC WS57C49B-EMBS-AV1.0
IC115	8-759-704-32	s	IC WS57C49B-EMBS-BV1.0
IC116	8-759-704-29	s	IC WS57C291B-K2U11-V1.0
IC117	8-759-704-30	s	IC WS57C291B-K2L11-V1.0
IC118	8-759-504-97	s	IC CXD8190Q
IC119	8-759-504-90	s	IC CXD8063Q
IC120	8-759-504-91	s	IC CXD8062Q
IC121	8-759-504-90	s	IC CXD8063Q
IC122	8-759-504-91	s	IC CXD8062Q
IC123	8-759-925-74	s	IC SN74HC04NS
IC128	8-759-925-76	s	IC SN74HC08ANS
IC201	8-759-704-27	s	IC WS57C45-SIN1-V1.0
IC202	8-759-704-28	s	IC WS57C45-SIN2-V1.0
IC203	8-759-504-91	s	IC CXD8062Q
IC204	8-759-505-02	s	IC CXD8053Q
IC205	8-759-505-07	s	IC CXD8059Q
IC206	8-759-505-07	s	IC CXD8059Q
IC207	8-759-504-90	s	IC CXD8063Q
IC208	8-759-504-90	s	IC CXD8063Q
IC209	8-759-504-97	s	IC CXD8190Q
IC210	8-759-504-91	s	IC CXD8062Q
IC211	8-759-505-08	s	IC CXD8060Q
IC212	8-759-504-99	s	IC CXD8065Q
IC213	8-759-504-98	s	IC CXD8056Q
IC216	8-759-704-29	s	IC WS57C291B-K2U11-V1.0
IC217	8-759-704-30	s	IC WS57C291B-K2L11-V1.0
IC218	8-759-504-97	s	IC CXD8190Q
IC220	8-759-504-91	s	IC CXD8062Q
IC222	8-759-504-91	s	IC CXD8062Q
IC223	8-759-925-74	s	IC SN74HC04NS
IC224	8-759-205-37	s	IC SN74HC574NS
IC225	8-759-205-37	s	IC SN74HC574NS
IC226	8-759-205-37	s	IC SN74HC574NS
IC227	8-759-205-37	s	IC SN74HC574NS
IC228	8-759-925-76	s	IC SN74HC08ANS
IC304	8-759-504-95	s	IC CXD8026Q
IC305	8-759-504-95	s	IC CXD8026Q
IC306	8-759-504-95	s	IC CXD8026Q
IC307	8-759-504-95	s	IC CXD8026Q
IC308	8-759-504-95	s	IC CXD8026Q
IC309	8-759-504-95	s	IC CXD8026Q
IC320	8-759-205-37	s	IC SN74HC574NS
IC321	8-759-205-37	s	IC SN74HC574NS

(MAT-1 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC322	8-759-205-37	s	IC SN74HC574NS
IC323	8-759-504-97	s	IC CXD8190Q
IC324	8-759-504-90	s	IC CXD8063Q
IC325	8-759-504-90	s	IC CXD8063Q
IC326	8-759-504-97	s	IC CXD8190Q
IC327	8-759-205-37	s	IC SN74HC574NS
IC328	8-759-205-37	s	IC SN74HC574NS
IC329	8-759-205-37	s	IC SN74HC574NS
IC330	8-759-205-37	s	IC SN74HC574NS
IC331	8-759-205-37	s	IC SN74HC574NS
TH1	1-809-179-11	s	THERMISTOR 102AT-2

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

XPT-1 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
2pcs	3-166-184-01	o	LEVER, PC BOARD
6pcs	7-621-773-87	s	SCREW +B 2.6X10
2pcs	7-622-207-05	s	N 2.6, TYPE 2
2pcs	7-626-320-11	s	PIN, SPRING 3X8
8pcs	7-682-948-01	s	SCREW +PSW 3X8
C1	1-124-941-11	s	ELECT 390uF 20% 6.3V
C2	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C3,4	1-124-941-11	s	ELECT 390uF 20% 6.3V
C5	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C6	1-124-941-11	s	ELECT 390uF 20% 6.3V
C10-12	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C20-27	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C30-37	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C41,42	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C50,53	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C60,61	1-163-251-11	s	CERAMIC, CHIP 100pF 5% 50V
C102	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C104-107	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C111-122	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C123,124	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C125	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C132	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C144	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C154	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C202	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C204-207	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C211-222	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C223,224	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C225	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C232	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C244	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C254	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C302	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C304-307	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C311-322	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C323,324	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C325	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C332	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C344	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C354	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C402	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C404-407	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C411-422	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C423,424	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C425	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C432	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C444	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C454	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C502	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C504-507	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C511-522	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C523,524	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C525	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C532	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C544	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C554	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C602	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C604-607	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C611-622	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V

(XPT-1 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C623,624	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C625	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C632	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C644	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C654	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C702	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C704-707	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C711-722	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C723,724	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C725	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C732	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C744	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C754	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C802	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C804-807	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C811-822	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C823,824	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C825	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C832	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C844	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C854	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C902	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C903	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C904-907	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C912-917	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C922-927	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C932-937	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C942-947	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C952-959	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
CN101	1-569-170-11	o	CONNECTOR, COAXIAL (SMALL TYPE)
CN201	1-569-170-11	o	CONNECTOR, COAXIAL (SMALL TYPE)
CN301	1-569-170-11	o	CONNECTOR, COAXIAL (SMALL TYPE)
CN401	1-569-170-11	o	CONNECTOR, COAXIAL (SMALL TYPE)
CN501	1-569-170-11	o	CONNECTOR, COAXIAL (SMALL TYPE)
CN601	1-569-170-11	o	CONNECTOR, COAXIAL (SMALL TYPE)
CN701	1-569-170-11	o	CONNECTOR, COAXIAL (SMALL TYPE)
CN801	1-569-170-11	o	CONNECTOR, COAXIAL (SMALL TYPE)
CNX1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNY1	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
CNZ1	1-506-748-11	s	CONNECTOR, DIN 96P, MALE
D12	8-719-800-76	s	DIODE 1SS226
D13	8-719-800-76	s	DIODE 1SS226
F1,2	⚠1-576-031-11	s	FUSE, MICRO 10A
IC10	8-759-505-27	s	IC SN75ALS195J
IC11	8-759-945-30	s	IC SN75ALS194N
IC12	8-759-505-00	s	IC CXD8052Q
IC20,21	8-759-244-71	s	IC TC74AC540F
IC22	8-759-244-75	s	IC TC74AC541F
IC23	8-759-244-85	s	IC TC74AC574F
IC24-26	8-759-505-06	s	IC CXD8058Q
IC27	8-759-234-77	s	IC TC4S66F-TE85L
IC30,31	8-759-032-59	s	IC MC74HC595AF
IC32	8-759-720-48	s	IC CAT35C104H
IC33	8-759-926-50	s	IC SN74HC251NS
IC34,35	8-759-994-64	s	IC MB88341PF

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

(XPT-1 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC36	8-759-243-06	s	IC TC74AC04F
IC37	8-759-505-00	s	IC CXD8052Q
IC101	8-741-602-11	s	IC SBX1602A
IC102	8-759-948-53	s	IC MB766P
IC104	8-759-001-25	s	IC MC10125L
IC105	8-759-506-58	s	IC CXD8199Q
IC106	8-759-320-87	s	IC HM63021P-28
IC107	8-759-320-87	s	IC HM63021P-28
IC108	8-759-035-93	s	IC SC7S32F
IC109	8-759-035-93	s	IC SC7S32F
IC201	8-741-602-11	s	IC SBX1602A
IC202	8-759-948-53	s	IC MB766P
IC204	8-759-001-25	s	IC MC10125L
IC205	8-759-506-58	s	IC CXD8199Q
IC206	8-759-320-87	s	IC HM63021P-28
IC207	8-759-320-87	s	IC HM63021P-28
IC208	8-759-035-93	s	IC SC7S32F
IC209	8-759-035-93	s	IC SC7S32F
IC301	8-741-602-11	s	IC SBX1602A
IC302	8-759-948-53	s	IC MB766P
IC304	8-759-001-25	s	IC MC10125L
IC305	8-759-506-58	s	IC CXD8199Q
IC306	8-759-320-87	s	IC HM63021P-28
IC307	8-759-320-87	s	IC HM63021P-28
IC308	8-759-035-93	s	IC SC7S32F
IC309	8-759-035-93	s	IC SC7S32F
IC401	8-741-602-11	s	IC SBX1602A
IC402	8-759-948-53	s	IC MB766P
IC404	8-759-001-25	s	IC MC10125L
IC405	8-759-506-58	s	IC CXD8199Q
IC406	8-759-320-87	s	IC HM63021P-28
IC407	8-759-320-87	s	IC HM63021P-28
IC408	8-759-035-93	s	IC SC7S32F
IC409	8-759-035-93	s	IC SC7S32F
IC501	8-741-602-11	s	IC SBX1602A
IC502	8-759-948-53	s	IC MB766P
IC504	8-759-001-25	s	IC MC10125L
IC505	8-759-506-58	s	IC CXD8199Q
IC506	8-759-320-87	s	IC HM63021P-28
IC507	8-759-320-87	s	IC HM63021P-28
IC508	8-759-035-93	s	IC SC7S32F
IC509	8-759-035-93	s	IC SC7S32F
IC601	8-741-602-11	s	IC SBX1602A
IC602	8-759-948-53	s	IC MB766P
IC604	8-759-001-25	s	IC MC10125L
IC605	8-759-506-58	s	IC CXD8199Q
IC606	8-759-320-87	s	IC HM63021P-28
IC607	8-759-320-87	s	IC HM63021P-28
IC608	8-759-035-93	s	IC SC7S32F
IC609	8-759-035-93	s	IC SC7S32F
IC701	8-741-602-11	s	IC SBX1602A
IC702	8-759-948-53	s	IC MB766P
IC704	8-759-001-25	s	IC MC10125L
IC705	8-759-506-58	s	IC CXD8199Q
IC706	8-759-320-87	s	IC HM63021P-28
IC707	8-759-320-87	s	IC HM63021P-28
IC708	8-759-035-93	s	IC SC7S32F
IC709	8-759-035-93	s	IC SC7S32F
IC801	8-741-602-11	s	IC SBX1602A

(XPT-1 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC802	8-759-948-53	s	IC MB766P
IC804	8-759-001-25	s	IC MC10125L
IC805	8-759-506-58	s	IC CXD8199Q
IC806	8-759-320-87	s	IC HM63021P-28
IC807	8-759-320-87	s	IC HM63021P-28
IC808	8-759-035-93	s	IC SC7S32F
IC809	8-759-035-93	s	IC SC7S32F
IC902	8-759-504-95	s	IC CXD8026Q
IC903	8-759-504-95	s	IC CXD8026Q
IC904	8-759-504-95	s	IC CXD8026Q
IC905	8-759-504-95	s	IC CXD8026Q
IC906	8-759-504-95	s	IC CXD8026Q
IC907	8-759-504-95	s	IC CXD8026Q
L1,2	1-421-370-00	s	COIL, CHOKE
L101	1-412-026-11	s	INDUCTOR, CHIP 1uH
L201	1-412-026-11	s	INDUCTOR, CHIP 1uH
L301	1-412-026-11	s	INDUCTOR, CHIP 1uH
L401	1-412-026-11	s	INDUCTOR, CHIP 1uH
L501	1-412-026-11	s	INDUCTOR, CHIP 1uH
L601	1-412-026-11	s	INDUCTOR, CHIP 1uH
L701	1-412-026-11	s	INDUCTOR, CHIP 1uH
L801	1-412-026-11	s	INDUCTOR, CHIP 1uH
Q11	8-729-216-22	s	TRANSISTOR 2SA1162
Q12	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q71-78	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q81-88	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q101	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q102	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q103	8-729-216-22	s	TRANSISTOR 2SA1162
Q105	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q201	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q202	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q203	8-729-216-22	s	TRANSISTOR 2SA1162
Q205	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q301	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q302	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q303	8-729-216-22	s	TRANSISTOR 2SA1162
Q305	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q401	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q402	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q403	8-729-216-22	s	TRANSISTOR 2SA1162
Q405	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q501	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q502	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q503	8-729-216-22	s	TRANSISTOR 2SA1162
Q505	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q601	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q602	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q603	8-729-216-22	s	TRANSISTOR 2SA1162
Q605	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q701	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q702	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q703	8-729-216-22	s	TRANSISTOR 2SA1162
Q705	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q801	8-729-143-46	s	TRANSISTOR 2SC3356-R24
Q802	8-729-601-58	s	TRANSISTOR 2SC3053-1C
Q803	8-729-216-22	s	TRANSISTOR 2SA1162
Q805	8-729-601-58	s	TRANSISTOR 2SC3053-1C

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

(XPT-1 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
TH10	1-809-179-11	s	THERMISTOR 102AT-2

CN-310 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-434-A	o	MOUNTED CIRCUIT BOARD, CN-310
1pc	2-270-616-00	o	HANDLE
6pcs	3-166-187-01	o	SPACER
1pc	3-166-201-02	o	PANEL, BNC
1pc	3-166-304-02	o	PANEL (1), CONNECTOR
1pc	3-167-576-01	o	BRACKET, HANDLE
24pcs	3-673-910-21	o	SCREW, CONNECTOR
4pcs	7-622-207-05	s	N 2.6, TYPE 2
4pcs	7-628-254-20	s	SCREW +PS 2.6X8
2pcs	7-682-561-04	s	SCREW +B 4X8
4pcs	7-682-903-01	s	SCREW +PWH 3X5
8pcs	7-682-947-01	s	SCREW +PSW 3X6
CN1-6	1-580-356-11	s	CONNECTOR, BNC
CNA1,2	1-563-890-21	s	CONNECTOR, D-SUB 9P, FEMALE
CNC1	1-563-890-21	s	CONNECTOR, D-SUB 9P, FEMALE
CNE1,2	1-563-890-21	s	CONNECTOR, D-SUB 9P, FEMALE
CNF1	1-563-890-21	s	CONNECTOR, D-SUB 9P, FEMALE
CNG1	1-563-891-21	s	SOCKET, D-SUB CONNECTOR 25P
CNM1	1-563-890-21	s	CONNECTOR, D-SUB 9P, FEMALE
CNS1	1-563-890-21	s	CONNECTOR, D-SUB 9P, FEMALE
CNT1	1-563-891-21	s	SOCKET, D-SUB CONNECTOR 25P
CNT2	1-563-893-21	s	SOCKET, D-SUB CONNECTOR 50P
CNU1	1-563-890-21	s	CONNECTOR, D-SUB 9P, FEMALE
CNZ1,2	1-563-337-11	s	CONNECTOR, DIN 96P, FEMALE

CN-311 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-435-A	o	MOUNTED CIRCUIT BOARD, CN-311
1pc	2-270-616-00	o	HANDLE
1pc	3-166-215-02	o	PANEL (2), CONNECTOR
1pc	3-167-576-01	o	BRACKET, HANDLE
2pcs	7-622-207-05	s	N 2.6, TYPE 2
2pcs	7-628-254-20	s	SCREW +PS 2.6X8
2pcs	7-682-561-04	s	SCREW +B 4X8
4pcs	7-682-903-01	s	SCREW +PWH 3X5
1pc	7-682-947-01	s	SCREW +PSW 3X6
CN1-16	1-580-356-11	s	CONNECTOR, BNC
CNZ1	1-563-337-11	s	CONNECTOR, DIN 96P, FEMALE

CN-312 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-437-A	o	MOUNTED CIRCUIT BOARD, CN-312 (B)
1pc	2-270-616-00	o	HANDLE
1pc	3-166-221-02	o	PANEL (5), CONNECTOR
1pc	3-167-576-01	o	BRACKET, HANDLE
4pcs	7-622-207-05	s	N 2.6, TYPE 2
4pcs	7-628-254-20	s	SCREW +PS 2.6X8
2pcs	7-682-561-04	s	SCREW +B 4X8
4pcs	7-682-903-01	s	SCREW +PWH 3X5
1pc	7-682-947-01	s	SCREW +PSW 3X6
CN1-16	1-580-356-11	s	CONNECTOR, BNC
CNZ1,2	1-563-337-11	s	CONNECTOR, DIN 96P, FEMALE

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

CN-456 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6263-090-A	o	MOUNTED CIRCUIT BPARD, CN-456
1pc	7-682-648-09	s	SCREW +PS 3X8
1pc	7-684-023-04	s	N 3, TYPE 2
C1	1-124-518-11	s	ELECT 470uF 20% 6.3V
C5	1-124-518-11	s	ELECT 470uF 20% 6.3V
C7	1-131-347-00	s	TANTALUM 1uF 10% 35V
C8	1-124-522-11	s	ELECT 270uF 20% 16V
C10	1-124-522-11	s	ELECT 270uF 20% 16V
C12	1-124-522-11	s	ELECT 270uF 20% 16V
C14	1-124-522-11	s	ELECT 270uF 20% 16V
CN1	1-560-366-00	o	CONNECTOR, POST HEADER, ILG (4P)
CN2-4	1-506-482-21	o	PIN, CONNECTOR 3P
CN5	1-560-366-00	o	CONNECTOR, POST HEADER, ILG (4P)
D1	8-719-500-15	s	DIODE S3S4M
F1	⚠1-576-031-11	s	FUSE, MICRO 10A
FB1,2	1-535-178-00	s	BEAD, FERRITE
IC1	8-759-505-30	s	IC LT1171CT
L1	1-424-450-11	s	COIL, CHOKE 2.0mH
L2	1-424-449-11	s	COIL, CHOKE 110mH
R1	1-249-417-11	s	CARBON 1k 5% 1/4W
R2	1-249-429-11	s	CARBON 10k 5% 1/4W
R3	1-249-418-11	s	CARBON 1.2k 5% 1/4W
R4-6	1-249-422-11	s	CARBON 2.7k 5% 1/4W
R7	1-249-417-11	s	CARBON 1k 5% 1/4W
TH1	1-809-179-11	s	THERMISTOR 102AT-2

CN-503 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-438-A	o	MOUNTED CIRCUIT BOARD, CN-503
1pc	2-270-616-00	o	HANDLE
1pc	3-166-217-02	o	PANEL (3), CONNECTOR
1pc	3-167-576-01	o	BRACKET, HANDLE
2pcs	7-622-207-05	s	N 2.6, TYPE 2
2pcs	7-628-254-20	s	SCREW +PS 2.6X8
2pcs	7-682-561-04	s	SCREW +B 4X8
4pcs	7-682-903-01	s	SCREW +PWH 3X5
1pc	7-682-947-01	s	SCREW +PSW 3X6
CN1-8	1-580-356-11	s	CONNECTOR, BNC
CNZ1	1-563-337-11	s	CONNECTOR, DIN 96P, FEMALE

MB-245 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
8pcs	1-580-355-11	o	HOUSING 96P
84pcs	7-622-207-05	s	N 2.6, TYPE 2
84pcs	7-628-254-20	s	SCREW +PS 2.6X8
CN1	1-560-368-00	o	CONNECTOR, POST HEADER, ILG (6P)
CNP2-9	1-535-869-11	s	INSERT, POWER
CNX1-18	1-565-206-11	o	CONNECTOR, DIN 128P, MALE
CNY1-18	1-565-206-11	o	CONNECTOR, DIN 128P, MALE
CNZ1,2	1-580-299-11	o	CONNECTOR, DIN 96P
CNZ5-8	1-563-337-11	s	CONNECTOR, DIN 96P, FEMALE
CNZ10,12	1-580-299-11	o	CONNECTOR, DIN 96P
CNZ13,14	1-563-337-11	s	CONNECTOR, DIN 96P, FEMALE
CNZ15-18	1-580-299-11	o	CONNECTOR, DIN 96P
R1-16	1-249-409-11	s	CARBON 220 5% 1/4W
R17-19	1-249-405-11	s	CARBON 100 5% 1/4W

LE-76 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-631-489-11	o	PRINTED CIRCUIT BOARD, LE-76
CN1	1-580-356-11	s	CONNECTOR, BNC
1pc	8-719-920-05	s	DIODE SLP281C-50

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

FRAME

Ref. No. or Q'ty	Part No.	SP	Description
4pcs	1-249-408-11	s	CARBON 180 5% 1/4W
3pcs	⚠1-413-414-13	s	REGULATOR, SWITCHING (EWS180-5)
1pc	⚠1-424-136-11	s	FILTER, NOISE
1pc	1-506-468-11	o	CONNECTOR, 3P, MALE
1pc	⚠1-526-813-12	s	INLET, AC 3P, MALE
3pcs	1-541-329-31	s	FAN, DC (WITH ALARM)
1pc	⚠1-572-345-11	s	SWITCH, ROCKER (AC POWER)
1pc	1-631-489-11	o	PRINTED CIRCUIT BOARD, LE-76
CB1	⚠1-576-036-11	s	BREAKER, CIRCUIT 6A 250V

(TO CN-456 BOARD)

CN1	1-561-516-00	o	HOUSING, ILG, 4P
	1-560-372-00	o	TERMINAL, SOLDERLESS, ILG
CN5	1-561-516-00	o	HOUSING, ILG, 4P
	1-560-372-00	o	TERMINAL, SOLDERLESS, ILG

(TO LE-76 BOARD)

CN1	1-569-196-11	o	HOUSING, 3P
	1-569-194-11	o	TERMINAL, SOLDERLESS

(TO MB-245 BOARD)

CN1	1-561-518-00	o	HOUSING, ILG, 6P
	1-560-372-00	o	TERMINAL, SOLDERLESS, ILG
CNP2	1-535-427-00	o	TERMINAL, SOLDERLESS, AWG-14,16
CNP3	1-535-427-00	o	TERMINAL, SOLDERLESS, AWG-14,16
CNP4	1-535-427-00	o	TERMINAL, SOLDERLESS, AWG-14,16
CNP5	1-535-427-00	o	TERMINAL, SOLDERLESS, AWG-14,16
CNP6	1-535-427-00	o	TERMINAL, SOLDERLESS, AWG-14,16
CNP7	1-535-427-00	o	TERMINAL, SOLDERLESS, AWG-14,16
CNP8	1-535-427-00	o	TERMINAL, SOLDERLESS, AWG-14,16
CNP9	1-535-427-00	o	TERMINAL, SOLDERLESS, AWG-14,16

(TO CN10 FOR MOTHER BOARD)

	1-580-352-11	o	HOUSING, 20P, MALE
	1-580-358-21	o	TERMINAL, SOLDERLESS, AWG-22
	1-580-359-21	o	TERMINAL, SOLDERLESS, AWG-16

(TO CN10 FOR POWER SUPPLY UNIT)

	1-580-349-11	o	HOUSING, 20P, FEMALE
	1-580-358-21	o	TERMINAL, SOLDERLESS, AWG-22
	1-580-359-21	o	TERMINAL, SOLDERLESS, AWG-16

(TO CN20 FOR MOTHER BOARD)

	1-580-352-11	o	HOUSING, 20P, MALE
	1-580-359-21	o	TERMINAL, SOLDERLESS, AWG-16
	1-580-360-21	o	TERMINAL, SOLDERLESS, AWG-14

(FRAME)

Ref. No. or Q'ty	Part No.	SP	Description

(TO CN20 FOR POWER SUPPLY UNIT)

	1-580-349-11	o	HOUSING, 20P, FEMALE
	1-580-359-21	o	TERMINAL, SOLDERLESS, AWG-16
	1-580-360-21	o	TERMINAL, SOLDERLESS, AWG-14

(TO SWITCHING REGULATOR)

	⚠1-535-321-11	o	TERMINAL, SOLDERLESS, AWG18-22
	1-535-580-11	o	TERMINAL, SOLDERLESS
	1-535-427-00	o	TERMINAL, SOLDERLESS, AWG-14,16

(TO AC INLET)

	1-535-446-00	o	TERMINAL, FASTEN

(TO AC LINE FILTER)

	1-535-446-00	o	TERMINAL, FASTEN

(TO CB1)

	1-535-446-00	o	TERMINAL, FASTEN

(TO S1)

	1-563-156-11	o	TERMINAL, FASTEN

(TO EARTH)

	1-535-316-11	s	TERMINAL, GROUND (M4)

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts List".

PACKING MATERIALS & SUPPLIED ACCESSORIES

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6279-727-A	s	EX-209 ASSY
1pc	A-6279-728-A	o	RAIL (R) ASSY
1pc	3-701-439-21	s	WASHER
1pc	7-624-105-04	s	STOP RING 2.3, TYPE -E
3pcs	7-682-903-01	s	SCREW +PWH 3X5
1pc	A-6279-729-A	o	RAIL (L) ASSY
1pc	3-701-439-21	s	WASHER
1pc	7-624-105-04	s	STOP RING 2.3, TYPE -E
3pcs	7-682-903-01	s	SCREW +PWH 3X5
1pc	1-506-748-11	s	CONNECTOR, DIN 96P, MALE
1pc	1-563-341-11	s	CONNECTOR, DIN 96P, FEMALE
2pcs	1-565-205-12	o	CONNECTOR, 4 LINE DIN 128P, FEMALE
2pcs	1-565-207-21	s	CONNECTOR, DIN 128P, MALE
1pc	3-166-184-01	o	LEVER, PC BOARD
4pcs	3-167-578-01	s	NUT, PLATE
1pc	3-167-579-01	o	BRACKET, PC BOARD LEVER
1pc	3-167-586-01	o	PLATE, SHIELD
16pcs	7-621-773-87	s	SCREW +B 2.6X10
8pcs	7-622-207-05	s	N 2.6, TYPE 2
1pcs	7-626-320-11	s	PIN, SPRING 3X8
14pcs	7-682-948-01	s	SCREW +PSW 3X8
1pc	⚠1-506-411-21	s	ADAPTOR, AC PLUG 3P-2P
1pc	⚠1-557-377-11	s	CORD, POWER
1pc	1-569-221-11	o	CONNECTOR, BNC (WITH RESISTOR)
1pc	2-990-242-01	s	HOLDER (B), PLUG
1pc	3-701-640-00	s	BAG, POLYETHYLENE
1pc	3-701-648-00	s	BAG, POLYETHYLENE

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Parts list".

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